

## LICENSE AGREEMENT

**THIS LICENSE AGREEMENT** (“Agreement”) is made as of the date on the signature page by and between the **CITY AND COUNTY OF DENVER, a municipal corporation** (“City”), and **VERIZON WIRELESS (VAW) LLC d/b/a VERIZON WIRELESS**, a Delaware limited liability company, whose principal office is One Verizon Way, Mail Stop 4AW100, Basking Ridge, NJ 07920 (“Licensee”). City and Licensee may be referred to collectively herein as the “Parties”, or individually as a “Party”.

### SECTION 1 LICENSE RIGHTS

#### 1.01 Licensed Property.

City owns property located in the City and County of Denver, known as the parking facility at the Denver Performing Arts Complex (“Parking Facility”). For purposes of this Agreement, the designated areas at the Parking Facility are located at 1040 14<sup>th</sup> Street, Denver, Colorado (“Licensed Property”). City hereby grants to Licensee a limited, non-exclusive License for the use of certain designated areas on the Licensed Property as depicted on **Exhibit A** (“Licensed Area”).

#### 1.02 Permitted Use.

The Licensed Property (or “Property”) shall be used for the installation, maintenance, alteration, repair, replacement, operation, and removal of radio frequency equipment and a wireless communication facility, and related equipment, infrastructure and utility connections (collectively the “System”) at designated locations at the Licensed Property. The System shall be owned by Licensee and, except as set forth in sections 5.06, 5.07, 6.05 and 8.02 of this License Agreement, may not be touched or otherwise interfered without the express prior written permission of Licensee. Licensee may use the Licensed Property only for the uses set forth in this Agreement and consistent with **Exhibit C** (Minimum Technical Standards).

Licensee is authorized to operate in the following FCC-licensed radio bands and frequencies (and no others):

<u>Band</u>	<u>Frequencies</u>
850 B:	TX 880.92MHz - 889.5MHz, RX 835.92MHz - 844.5MHz
B':	TX 892.5MHz - 893.7MHz, RX 847.5MHz - 848.7MHz
700 C:	TX 746MHz - 756MHz, RX 777MHz - 787MHz
700 Upper C:	TX: 746-756MHz, RX: 777MHz-787MHz
AWS B:	TX 2120MHz - 2130MHz, RX 1720MHz - 1730MHz
AWS J:	TX 2170MHz - 2180MHz, RX 1770MHz - 1780MHz
PCS EF:	TX 1965MHz - 1975MHz, RX 1885MHz - 1895MHz

Operation in any unlicensed radio band (as defined by the FCC) is prohibited.

### **1.03 City's Representative.**

The City's Executive Director of Arts & Venues Denver, or his/her Designee (herein, the "Director") authorizes all activities performed under this Agreement.

## **SECTION 2 TERM**

### **2.01 Term of the Agreement.**

The Term of this Agreement shall commence upon the later of the first day of the month after the City's full execution of this Agreement or January 1, 2019 (the "Commencement Date"), and shall terminate on the first day of the twenty-fourth (24<sup>th</sup>) month thereafter (the "Termination Date") unless extended by written agreement of the parties, executed in the same manner as this Agreement. The Parties agree to acknowledge the Commencement Date in writing. The term of this Agreement may be extended by the City under the same terms and conditions for additional three (3) one (1) year renewal terms by a written amendment to this Agreement. Licensee must provide the Director with written notice of its intent to renew no less than thirty (30) days prior to the Termination Date.

### **2.02 Early Termination.**

Neither Party may terminate this Agreement during the first six (6) months after the Commencement Date. Either Party may terminate this Agreement without cause with sixty (60) days written notice to the other Party.

**2.03 Relocation.** After the first six (6) months following the Commencement Date of this Agreement and upon request of the City, Licensee agrees to relocate its equipment on a temporary basis to another location on the real property comprising the Parking Facility or other City property in the vicinity thereof, hereinafter referred to as the "Relocation Space," for the purpose of allowing City to demolish the Parking Facility and construct a new Parking Facility, which may be in a new location, provided:

(a) The Relocation Space is similar to Licensee's existing location in size and is fully compatible for Licensee's use, in Licensee's reasonable determination;

(b) City gives Licensee sixty (60) days written notice of its intent to relocate Licensee;

All costs for Licensee's relocation shall be at Licensee's expense. The City shall have the right to approve of the location and design of Licensee's use of the Relocation Space and its new Permanent Facility, which such approval shall not result in additional or increased rents hereunder or be unreasonably withheld, conditioned or delayed. At the request of either Party, the Parties shall execute amendments hereto in order to memorialize the Relocation Space.

**SECTION 3  
FEES**

**3.01 License Fees.**

Licensee agrees to pay City a monthly fee (“License Fee”) of three thousand five hundred nine dollars and 58 cents (\$3,509.58), payable in monthly installments beginning on the Commencement Date, and continuing on the first day of each month thereafter. The License Fee shall increase three percent (3%) each year, with the increased License Fee taking effect on the anniversary of the Commencement Date of each year.

**3.02 Place and Manner of Payments.**

All sums payable to City shall be made payable without notice to:

Manager of Finance  
City and County of Denver  
201 W. Colfax Avenue, Dept. 1010  
Denver, CO 80202  
Attention: Real Estate

All payments shall be made in legal tender of the United States. Any payment not made to City accrues interest at the lesser of (i) 18% per annum, or (ii) the maximum interest rate allowed under law, commencing on the tenth (10<sup>th</sup>) calendar day after the date such amount is due and owing until paid to City. Licensee agrees to pay any charges, fees, or costs incurred by the City for collection of unpaid License Fees, including reasonable attorney’s fees.

**SECTION 4  
INSTALLATION AND CONSTRUCTION**

**4.01 Plans and Specifications of the System.**

(a) The Licensee shall at its sole cost and expense, design and construct upon the Licensed Property, the System pursuant to the plans and specifications set forth in **Exhibits B and C**, and in accordance with the requirements of this Agreement. The System shall in all respects be constructed in accordance with all applicable rules and regulations of the City, and pursuant to any required building permit and zoning permit to be obtained from the City, and according to requirements or design guidelines of the City’s Technology Services division, if any, and/or the Director.

(b) Prior to any installation and/or construction, four (4) copies of full and complete plans and specifications for the System must be submitted to the Director for review. These plans and specifications must include complete specifications of transmitter power, operating frequencies, filter passband and rejection characteristics, antenna model numbers and radiation patterns (both horizontal and vertical plane patterns), antenna height and location. Within fifteen (15) days of receipt, the City will either approve or reject the submission. Any rejection shall detail the reasons

for the rejection.

#### **4.02 Installation.**

(a) Licensee agrees to install the System consistent with the approved plans and specifications, **Exhibit B**, and **Exhibit C** attached hereto.

(b) Prior to the commencement of installation of the System, Licensee or its contractor shall obtain and pay for all required permits. Good and workmanlike standards of design, construction and installation shall be required in connection with all such work, and the System shall conform at a minimum with applicable statutes, ordinances, building codes and regulations.

(c) Upon completion of the System, Licensee shall furnish to the Director evidence of payment, contractor's affidavits and full and final waivers of all liens for labor, services, or materials.

(d) Licensee shall include in Licensee's agreement with its contractors provisions whereby such contractor shall defend and hold harmless the City from all costs, liens, damages and expenses related to such work.

(e) Equipment shall be located in designated locations as defined by the City (preferably in existing phone rooms or other discreet locations). Antennas shall be placed in discreet locations as approved by the venue. These locations can be in and around the Licensed Area.

(f) Licensee is responsible for all installation costs and to comply with all applicable laws, rules and regulations pertaining to Licensee's use and operation of the System. City is not obligated to make any modifications to the Licensed Property, including the Licensed Area, to support the installation of the System. If Licensee desires to make modifications to the Licensed Area, it must obtain prior written approval from the City; Licensee is responsible for the cost of modifications. Licensee may utilize existing conduit/cabling infrastructure as approved by the City as long as it does not materially and adversely interfere with current venue and events operations, and must do so on a first come first served basis.

(g) Licensee is responsible for acquiring land lines required for the installation and operation of the System.

(h) The City is not responsible for Licensee's equipment. Licensee shall be responsible to keep their equipment and System in good working order.

#### **4.03 Construction Payment and Performance Bonds.**

Prior to the commencement of the installation, construction and/or modification of the System, the Licensee and its contractors shall furnish to the City upon City's request, corporate surety bonds or such other acceptable sureties as approved in writing by the City, issued by a surety company licensed to transact business in the State and satisfactory to the City with the Licensee and



its contractor or contractors as principals, in a sum not less than 100% of the total cost of the contract or contracts for the construction of the System. Such bonds shall guarantee prompt and faithful performance of such contracts and prompt payment by the Licensee to its contractors and by the Licensee's contractors to all persons supplying labor, materials, supplies, rental machinery, tools and equipment used directly or indirectly by such contractor, subcontractors of all tiers and suppliers in the prosecution of the work provided for in such construction contract and shall protect and indemnify the City from any liability, losses or damages arising therefrom.

#### **4.04 Access.**

(a) Subject to any rules and regulations or standards heretofore or hereafter adopted and promulgated by the City or the Director, including without limitation any nondiscriminatory rules and regulations governing entrance to and use of the Licensed Property, Licensee has the reasonable right of access, ingress to and egress from the System and Licensed Property for the Licensee's employees, and agents, its or their suppliers of materials and furnishers of service, so long as such personnel have sufficient identification badges, and its or their equipment, vehicles, machinery and other property necessary for the repair, maintenance, removal, installation or operation of the System, all with prior notice to and approval from the Director.

(b) The Licensee shall perform all construction and regularly scheduled maintenance work between the hours of 7:00 a.m. and 5:00 p.m.

(c) Emergency Access: In the event of a bona fide emergency, which shall be deemed to include any failure of Licensee's System, or any portion thereof, Licensee shall contact City or its representative for commercially practicable access. The City reserves the right to require a City escort at dates and times determined by the City. Licensee may reach a City representative to arrange access by calling (303) 697-1335.

#### **4.05 Modification of Access Route.**

The City may, at any time, temporarily or permanently, close any particular access to the Licensed Property, so long as a means of access is substituted and is concurrently made available Licensee, except in the case of an emergency. The Licensee hereby releases and discharges the City from any and all claims, demands or causes of action which the Licensee may now, or at any time hereafter, have against the City, arising or alleged to arise out of the closing of any point of access to the Licensed Property.

## **SECTION 5 USE AND OPERATION**

#### **5.01 Changes to System.**

Licensee shall give City prior written notice of any proposed change in radio cabinets, transmitter power, frequencies, filters, number of antennas, antenna locations, antenna height, or antenna orientation. City shall have the right to reasonably review, approve or disapprove any such change within thirty (30) days after receiving such written notice. All such changes shall be subject

to the Minimum Technical Standards, installation and preoperational conditions set forth herein.

## **5.02 Radio Frequency Interference.**

Licensee shall diligently work to prevent and, in the event of failure to do so, immediately correct radio frequency interference to the City's operations and events, event tenants and all activity therein, as well as public safety/licensee systems, licensee's or licensee's receivers and City's 802.11b WiFi system. To help achieve this goal, Licensee shall comply with the following:

(a) Compliance with Government Regulations. Licensee agrees to comply with all federal, state, local, or other government regulations applicable to Licensee and its activities in and upon the Licensed Property, hereunder including, but not limited to, regulations and standards published by the FCC.

(b) Radio Frequency Interference Study. Upon written request by City, Licensee agrees to conduct a radio frequency study prior to commencing operations and/or during the entire term of this Agreement at the Licensed Property, and to furnish City with the results of the study and include it as part of the Licensee's System Plans and Specifications.

(c) Compliance with Minimum Technical Standards. Licensee agrees to comply with the most recent edition of the Minimum Technical Standards attached hereto as **Exhibit C**. City may update the Minimum Technical Standards from time-to-time, as required, to address the state-of-the-art.

(d) Maintenance. Licensee shall maintain, at no cost to the City, and repair Licensee's System, to comply with FCC rules and to prevent interference.

(e) Changes and Additions to System. Licensee shall have the right to replace, repair, add or otherwise modify its equipment, antennas and/or conduits or any portion thereof and the frequencies over which the equipment operates, whether the equipment, antennas, conduits or frequencies are specified or not on any exhibit attached hereto; provided, however, any "material" modifications, repairs, or replacements must be approved by the City by prior written consent. As used herein the term "material" shall not include any and all changes to equipment inside the equipment space; like for like swap of antennas and related equipment; or other additions, replacements, upgrades or alterations of Licensee's communications facilities in whole or in part within the confines of the licensed space which do not change the external physical appearance of the site or the frequencies over which Licensee's equipment operates. Further, an interference study shall be conducted by Licensee, at Licensee's expense, prior to any proposed frequency changes and must be approved by the City in writing prior to making any frequency changes.

(f) Additional Studies. When City, based on inquiry and evaluation, becomes aware of a potential interference problem caused directly or indirectly, wholly or partially, by Licensee's System, City may require Licensee to reimburse City for the cost of an interference study to include radio frequency measurements. The purpose of this interference study is to identify the problem or show whether the potential problem is caused directly or indirectly, wholly or partially by Licensee's System. This study shall be conducted by a consulting engineer selected by City after

consultation with Licensee. The total cost of the study shall be equally borne by the Licensee and any other licensees which may be hereafter approved by City. Upon completion of said study the cost may be allocated directly to the Licensee(s) which caused the interference.

(g) Interference Mitigation. When necessary to correct interference problems, as determined by City in City's reasonable discretion, Licensee agrees, at Licensee's expense, to install cavity-type bandpass filters, notch filters, isolators, or other state-of-the-art equipment. These equipment items are in addition to the minimum equipment of the Minimum Technical Standards. The minimum equipment items shall be installed regardless.

(h) Radio Frequency (RF). Licensee shall ensure that its Frequencies used for the operation of the System does not interfere with any operation of the Denver Performing Arts Complex. Licensee shall provide documentation of the frequencies that it is using which shall be a part of this Agreement. Licensee shall not occupy any frequencies that they are not using for the purposes of blocking other licensees from operating. Licensee shall be responsible for conducting an RF scan to verify there will be no interference with other systems. This shall occur prior to Licensee turning on its System and shall be documented by a third party vendor and submitted to City. Once City has reviewed the study they will give notice to Licensee that it can turn on its System. City shall reasonably review the documentation within fifteen (15) business days. If City is not satisfied with the details of the study, City will give notification to Licensee as to what needs to be remedied before notice to proceed will be given.

(i) Enforcement. If Licensee's equipment or operations cause radio frequency interference, as determined by the City in City's reasonable discretion, including without limitation interference with public safety or the City's public safety channels, radio system or other electronic means of public safety enforcement, and if the interference is not eliminated within ten days after written notice from City, then City may, at Licensee's expense, temporarily turn off the power to the System. In addition, the City retains the right to turn off the Licensee's System when the City reasonably believes that the Licensee's System causes interference with the Denver Performing Arts Complex, any venue therein, or any show or an event's equipment and operation. City shall contact Licensee at the time the System needs to be turned off so Licensee can facilitate the effort to turn off the System, isolate any interference, and turn the System back on with minimal interruption. Licensee, at the Licensee's expense, shall (i) have the right to make such repairs, maintenance, replacements or adjustments to the System as may be reasonably necessary to prevent such interference (all such repairs, maintenance, replacements or adjustments shall be performed in accordance with this Agreement), and (ii) have the right to conduct intermittent tests of the System at times mutually agreeable to City and the Licensee (in the exercise of both parties reasonable discretion) to determine if the System will continue to cause such interference.

City will use reasonable efforts to obtain similar provisions regarding the prevention and elimination of interference in any new license entered into by City with future licensees.

(j) Violations and Remedies. City requires that all licensees operate their respective systems with no interference to other licensees' systems. All disputes regarding the cause or resolution of specific interference problems or complaints must be evaluated by an independent third party selected by the City (and acceptable to Licensee in its reasonable discretion) who is

competent to evaluate the potential causes of the interference and the measures required for its resolution. If it is determined that interference to the equipment, frequencies or channels of the Licensee or other Licensees or users at the Licensed Property is a result of the non-compliance of those facilities with the City's Minimum Technical Standards, it shall be the responsibility of the Licensee or other Licensees or users to resolve the interference. If the interference continues when these facilities are brought into compliance with the Minimum Technical Standards, then it shall be the Licensee's responsibility to take whatever measures are necessary to resolve the interference as provided above.

(l) Definition of Interference. For the purposes of this Agreement, "interference" may include, but is not limited to, any use on Licensed Property that causes electronic or physical obstruction with, or degradation of, public safety communications signals, or a Denver Performing Arts Complex event-related communications signals.

### **5.03 Operational Test Procedures.**

The following test procedures shall be approved by City prior to or during, whichever is applicable, Licensee's operation of the System.

(a) Perform a desktop interference study to include all frequencies to be used by Licensee to ensure no interference is likely from intermodulation products or out-of-band emissions.

(b) Verify the results of the interference study by conducting appropriate measurements of the installed systems.

(c) If problems are found, make recommendations for additional filtering, channel changes, greater antenna separation, or other fixes, as necessary.

### **5.04 Compliance with Municipal Rules and Regulations.**

Licensee shall comply with and shall cause its officers and employees and any other persons over whom it has control to comply with such reasonable rules, regulations and standards governing the use of the System and any other portion of the Denver Performing Arts Complex as may from time to time be adopted and applied by the City in a uniform and non-discriminatory manner, for the management, operation and control of the Parking Facility, and with such reasonable amendments, revisions, additions and extensions thereof as may from time to time be adopted and applied in a uniform and non-discriminatory manner; provided, however, such rules and regulations shall not be inconsistent with the rights herein granted to Licensee.

### **5.05 Compliance with Other Governmental Regulations.**

Licensee shall, at all times, faithfully obey and comply with all existing and future laws, rules and regulations adopted by Federal, State, local or other governmental bodies and applicable to or affecting the Licensee and its operations and activities in and around the Licensed Property; provided, however, that the parties acknowledge and agree that the rules and regulations prescribed by the FCC shall govern and control issues related to frequency interference.

## **5.06 Repairs and Maintenance.**

The maintenance, care and any necessary replacement of the System shall be made by the Licensee. Licensee covenants and agrees during the Term hereof, after the occupancy of the System:

(a) that Licensee shall keep the System in good order and condition, and will make all necessary and appropriate repairs replacements and renewals thereof as reasonably determined by Licensee;

(b) that Licensee shall not permit rubbish, debris, waste materials or anything unsightly or detrimental to health, or likely to create a fire hazard, or conducive to deterioration, to remain on any part of the System or to be disposed of improperly;

(c) that Licensee shall at all times maintain the System in accordance with all applicable codes, Minimum Technical Standards of the City and manufacturer's specifications;

(d) that Licensee shall promptly repair any and all damage to, among other things, the structures, equipment and surrounding property at the Licensed Property as a result of Licensee's installation and operation of its System including, but not limited to, any leaks or physical damage as a result of roof penetrations or other physical penetrations to the building or structures caused by Licensee's antenna mountings, cable/conduit penetrations, and/or other workmen and maintenance activities. In the event the Licensee fails to repair any such damage noted in this Section 5.06(d), the City will have the right to conduct such repairs and invoice Licensee for the cost.

(e) that tools, test equipment and work materials shall only be stored in areas approved by the Director; and

(f) that all roof, building penetrations and other areas of the Licensed Area and/or Licensed Property modified by Licensee will be restored to original condition upon termination.

For purposes of this Section, the System, as it relates to Licensee, refers to Licensee's equipment and approved alterations thereto.

## **5.07 Right to Enter, Inspect and Make Repairs.**

The City and its authorized officers, employees, agents, contractors, subcontractors and other representatives shall have the right (at such times as may be reasonable under the circumstances and with as little interruption of the Licensee's operations as is reasonably practicable) to access Licensee's equipment for the following purposes:

(a) to inspect such equipment at reasonable intervals during regular business hours (or at any time in case of emergency) to determine whether Licensee has complied and is complying with the terms and conditions of this Agreement with respect to such Licensed Area, or, if applicable, to Licensed Property;

(b) to perform maintenance and make repairs and replacements in cases where the Licensee is obligated but has failed to do so, after the City has given the Licensee reasonable notice so to do, in which event Licensee shall reimburse the City for the reasonable cost thereof within thirty (30) days of Licensee's receipt of City's invoice accompanied by reasonable substantiation of the costs incurred. Such maintenance and repairs shall be limited to support systems that present a safety hazard or affect others such as HVAC, plumbing, lighting, fire suppression systems, etc. Under no circumstances will City attempt to repair or alter in any way Licensee's operational equipment such as base station radios, other electronic equipment, alarm systems, antennas, coaxial cable, DAS, UPS, etc.

No such access undertaken by or on behalf of the City in strict compliance with the provisions of this Section 5.07, shall cause or constitute a termination of the Agreement or be deemed to constitute an interference with the possession thereof by the Licensee.

#### **5.08 Care of Area.**

Licensee agrees that, in the course of its operations, Licensee will keep the Licensed Property in a neat, clean, safe, sanitary and orderly condition at all times, and further agrees that it will keep such area free at all times of all paper, rubbish, spills, and debris. Accumulation of boxes, cartons, barrels or other similar items shall not be permitted within any area of the Licensed Property.

#### **5.09 Utilities.**

(a) License Fee covers cost of electricity; however it does not cover the cost of providing service at locations where service is not currently located. If additional service locations need to be added, Licensee shall be responsible to install it in compliance with all applicable laws, codes and regulations ("Laws").

(b) Licensee shall be responsible for and provide an independent ventilation, heating and air conditioning system for those portions of the System, if any, that are expressly required by the manufacturer of the System to maintain manufacturer's warranties based upon Licensee's installation of the System in and upon the Licensed Area.

#### **5.10 Interruption of Utility Services.**

Licensee agrees that City shall not be liable for failure to supply any utility services. City reserves the right to temporarily discontinue utility services at such time as may be necessary by reason of accident, unavailability of employees, repairs, alterations or improvements or whenever by reason of strikes, lockouts, riots, acts of God or any other happenings beyond the control of the City, the City is unable to furnish such utility services. The City shall not be liable for damages to persons or property for such discontinuance. Nor shall such discontinuance in any way be construed as cause for abatement of fees, unless caused by the gross negligence or intentional misconduct of the City or its agents, contractors or employees, or operate to release the Licensee from any of its obligations hereunder.

## SECTION 6 INSURANCE AND INDEMNITY

### 6.01 Insurance.

General Conditions: Licensee agrees to secure, at the time of execution of this Agreement, the following insurance covering all operations, goods or services provided pursuant to this Agreement. Licensee shall keep the required insurance coverage in force at all times during the term of the Agreement, or any extension thereof, during any warranty period, and for one (1) year after termination of the Agreement. The required insurance shall be underwritten by an insurer licensed or authorized to do business in Colorado and rated by A.M. Best Company as “A-”VII- or better. Upon receipt of notice from its insurer(s) Licensee shall provide the City with thirty (30) days’ prior written notice of cancellation of any policies. Licensee shall provide written notice of cancellation, to the parties identified in the Notices section by first class mail, and referencing the City’s contract number. Licensee shall be responsible for the payment of any deductible or self-insured retention which all coverages secured by Licensee contain. The insurance coverages and requirements specified in this Agreement do not lessen or limit the liability of the Licensee. The Licensee shall maintain, at its own expense, any additional kinds or amounts of insurance that it may deem necessary to cover its obligations and liabilities under this Agreement.

(a) Proof of Insurance: Licensee may not commence services or work relating to the Agreement prior to placement of coverage. Licensee certifies that the certificate of insurance attached as Exhibit D, preferably an ACORD certificate, provided by Licensee complies with all insurance requirements of this Agreement. The City requests that the City’s contract number be referenced on the Certificate. The City’s acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Licensee’s breach of this Agreement or of any of the City’s rights or remedies under this Agreement.

(b) Additional Insureds: For Commercial General Liability and Auto Liability, Licensee shall include the City and County of Denver, its elected and appointed officials, employees and volunteers as additional insured as their interest may appear under this Agreement.

(c) Waiver of Subrogation: For all coverages required under this Agreement, Licensee’s insurer shall waive subrogation rights against the City.

(d) Subcontractors: Licensee shall require all contractors and subcontractors to procure and maintain substantially the same coverages required of the Licensee including, where applicable, the City as an additional insured as their interest may appear under this Agreement.

(e) Workers’ Compensation/Employer’s Liability Insurance: Licensee shall maintain the coverage as required by statute for each work location and shall maintain Employer’s Liability insurance with limits of \$100,000 each accident for bodily injury claim, \$100,000 for bodily injury caused by disease claim, and \$500,000 disease policy limit.

(f) Commercial General Liability: Licensee shall maintain a Commercial General Liability insurance policy with combined single limits of \$1,000,000 per occurrence for bodily injury and property damage and \$2,000,000 general aggregate including contractual liability, personal and advertising injury products and completed operations.

(g) Automobile Liability: Licensee shall maintain limits of \$1,000,000 combined single limit each accident for bodily injury and property damage covering all owned, nonowned and hired vehicles operating on City property and elsewhere for work under this Agreement.

(h) Additional Provisions:

(1) For Commercial General Liability, the policies must provide the following:

- (i) That this Agreement is an Insured Contract under the policy;
- (ii) A severability of interests or separation of insureds provision (no insured vs. insured exclusion); and
- (iii) A provision that coverage is primary and non-contributory with other coverage or self-insurance maintained by the City.

## **6.02 Indemnification.**

Licensee agrees to indemnify, release and hold harmless the City, and its officers, agents and employees, from and against any and all loss of or damage to property or injuries to or death of any person or persons, including property and officers and employees of the City, and shall defend, indemnify and save harmless the City, and its officers, agents and employees from any and all claims, damage, suits, costs, expense, liability, actions or proceedings of any kind or nature, of or by anyone whomsoever, in any way resulting from or arising out of, directly or indirectly, its use and/or operation and/or occupancy of City property or the Licensed Property and including acts and omissions of officers, employees, representatives, suppliers, invitees, contractors, subcontractors and agents of Licensee; provided, that the Licensee need not release, indemnify or save harmless the City, its officers, agents and employees from damages resulting from the sole negligence or willful misconduct of the City's officers, agents and employees. The minimum insurance requirements prescribed herein shall not be deemed to limit or define the obligations of Licensee hereunder.

## **6.03 Limitation on Liability.**

Licensee agrees that no liability shall attach to City for any damages or losses incurred or claimed by Licensee or any other person or party on account of the installation or construction of the System by Licensee. Licensee agrees that it shall not in any way seek damages or make any claims against the City for any interference or delay caused by construction in adjacent areas, other businesses or Parking Facility operations, including without limitation damages or losses in the nature of delay damages, lost labor productivity, and impact damages.

## **6.04 Environmental.**



Licensee shall conduct its business in compliance with all applicable laws governing the protection of the environment or employee health and safety (“EH&S Laws”). Licensee shall indemnify and hold harmless the City from claims to the extent resulting from Licensee’s violation of any applicable EH&S Laws or to the extent that Licensee causes a release of any regulated substance to the environment. The Parties recognize that Licensee is only licensing a small portion of the City’s property and that Licensee shall not be responsible for any environmental condition or issue except to the extent resulting from Licensee’s specific activities and responsibilities. In the event that Licensee encounters any hazardous substances that do not result from its activities, Licensee may relocate its facilities to avoid such hazardous substances to a mutually agreeable location or, the Licensee may remove at its own cost all or some the hazardous substances or materials (such as soil) containing those hazardous substances.

#### **6.05 Taxes, Licenses, Liens and Fees.**

Licensee agrees to promptly pay all taxes, excises, license fees and permit fees of whatever nature applicable to its operations hereunder and to take out and keep current all municipal, state or federal licenses required for the conduct of its business at and upon the Licensed Property and further agrees not to permit any of said taxes, excises, license fees or permit fees to become delinquent. Licensee also agrees not to permit any mechanic’s or materialman’s or any other lien to become attached or be foreclosed upon the Licensed Property, or improvements thereto, or any part or parcel thereof, by reason of any work or labor performed or materials furnished by any mechanic or materialman for Licensee, as contractors or subcontractors. Licensee further agrees to promptly pay when due all bills, debts and obligations incurred by it in connection with its operations hereunder, and not to permit the same to become delinquent and to suffer no lien, mortgage, judgment or execution to be filed against the Licensed Property or the System.

#### **6.06 City’s Rights.**

(a) City shall retain all the rights to the use, occupancy and ownership of the Licensed Property and fixtures herein described (subject to the Licensee’s rights set forth herein); and such use, occupancy and ownership shall not be interfered with by the exercise of the rights granted hereunder during the term hereof, except to the extent interference shall be a result of the installation, inspection, maintenance, alteration, repair, replacement, operation and removal of the System; provided, however, that Licensee shall reimburse City for any damage to improvements that may result from such installation, inspection, maintenance, alteration, repair, replacement, operation and removal.

(b) If the City desires Licensee to leave any modifications conducted by Licensee in place, then Licensee is permitted to leave it without compensation from the City. If Licensee does not restore modifications and the City does on their behalf, then Licensee shall reimburse the City for the work.

(c) City specifically reserves for itself, other lessees, licensees and assignees of City, all rights which do not materially and adversely interfere with Licensee’s use of the Licensed Property; provided, however, that neither City or its lessees, licensees and assignees shall have any right to

utilize or have access to the Licensee's electronic equipment, it being expressly acknowledged and agreed that certain portions of the Licensee's electronic equipment may contain confidential or Licensee-protected technology. City represents it will not materially and adversely interfere with, and will not permit or allow other Licensees or Licensees to materially and adversely interfere with, the rights of Licensee under the terms of this Agreement.

(d) Surrender of Licensed Property. Upon the expiration or earlier termination of this Agreement or on the date specified in any demand for possession by City after any default by Licensee (after any applicable notice and cure periods), Licensee covenants and agrees to surrender possession of the Licensed Property to City in the same condition as when first occupied, ordinary wear and tear excepted.

(e) Removal. Licensee shall remove, at its sole cost, at the expiration or termination of this Agreement, the System and all of Licensee's equipment within forty-five (45) days after the date of termination or expiration. If such removal shall injure or damage the Licensed Property, Licensee agrees, at its sole cost, to immediately repair such injury or damage in a good and workmanlike manner and to put the Property in substantially the same condition as it would have been if the System had not been installed, reasonable wear and tear excepted. If Licensee fails to remove the System and Licensee's equipment within forty-five (45) days after the expiration or termination of this Agreement, City, at its option, may remove, store and /or dispose of same and retain any proceeds therefrom, and further is entitled to recover any cost of City in removing same and in restoring the Licensed Property.

(f) Holding Over. If Licensee holds over after termination of this Agreement, and so long as the System remains on or within the Licensed Property (even if it has been disconnected) and Licensee's access continues, Licensee shall pay to City a holdover fee equal to 150% of the then total License fee prorated from the effective date of termination or Expiration Date, whichever is applicable, to the date the System is removed from the Property. Nothing herein shall be construed to give Licensee the right to hold over at any time, and City may exercise any and all remedies at law or in equity to recover possession of the Property, as well as any damages incurred by Licensee.

## **SECTION 7 SPECIAL COVENANTS**

### **7.01 Assignments.**

This Agreement may be sold, assigned or transferred by the Licensee without any approval or consent of the City to the Licensee's principal, affiliates, subsidiaries of its principal or to any entity which acquires all or substantially all of Licensee's assets in the market defined by the Federal Communications Commission in which the Property is located by reason of a merger, acquisition or other business reorganization, provided that such transferee has a net worth of not less than \$25,000,000. As to other parties, this Agreement may not be sold, assigned or transferred without the written consent of the City, which such consent will not be unreasonably withheld or conditioned and shall be provided in a commercially reasonable timeframe. No change of stock ownership, partnership interest or control of Licensee or transfer

upon partnership or corporate dissolution of Licensee shall constitute an assignment hereunder.

### **7.02 Use, Possession or Sale of Alcohol or Drugs.**

Licensee and its officers, agents and employees shall cooperate and comply with the provisions of the City and County of Denver's policy or order or any successor policy or order concerning the use, possession or sale of alcohol or drugs on City property.

### **7.03 Smoking Policy.**

Licensee and its officers, agents and employees shall cooperate and comply with the provisions of the City's policy or order prohibiting smoking in all indoor facilities and buildings and Licensee agrees it will take reasonable action to prohibit smoking by its employees in the public areas and Licensed Property except in specially designated areas.

## **SECTION 8 DEFAULT AND REMEDIES**

### **8.01 Default.**

Licensee shall be in substantial default under this Agreement if Licensee:

(a) Fails to timely pay within thirty (30) business days after receipt of written notice from the City that rent, fees or any other payments required hereunder are past due; or

(b) Becomes insolvent, or takes the benefit of any present or future insolvency or bankruptcy statute, or makes a general assignment for the benefit of creditors, or consents to the appointment of a receiver, trustee or liquidator of any or substantially all of its property; or

(c) Transfers its interest under this Agreement, unless such transfer is specifically authorized pursuant to Section 7.01; or

(d) Fails to timely submit plans and specifications, bonds and other pre-construction submittals or, required by the express terms of this Agreement and such failure continues for a period of thirty (30) days after Licensee has received written notice from the City of such failure; or

(e) Abandons, deserts or vacates the Licensed Property or Licensed Area; or

(f) Suffers any materialmen's or mechanic's lien or attachment to be filed against the System or City's property because of any act or omission of Licensee, and such lien or attachment is not discharged or contested by Licensee in good faith by proper legal proceedings within thirty (30) days after Licensee's receipt of written notice thereof from City; or

(g) Fails to keep, perform and observe any other promise, covenant or agreement set forth in this Agreement and such failure continues for a period of more than thirty (30) days after delivery by City of a written notice of such breach or default, except where a shorter period is

specified herein, or where fulfillment of its obligation requires activity over a period of time and Licensee within thirty 30 days of Licensee notice Licensee commences in good faith to perform whatever may be required to correct its failure to perform and continues such performance without interruption except for causes beyond its control; or

(h) Gives its permission to any person to use for any illegal purpose any portion of the City's property made available to Licensee for its use under this Agreement.

## **8.02 Remedies.**

If Licensee defaults in any of the covenants, terms and conditions herein and such default is not cured within any applicable notice and cure periods, the City may exercise any one or more of the following remedies:

(a) The City may elect to allow this Agreement to continue in full force and effect and to enforce all of City's rights and remedies hereunder, including without limitation the right to collect compensation as it becomes due together with interest; or

(b) The City may cancel and terminate this Agreement and repossess the Licensed Property and/or the System, and without liability for so doing, upon giving 30 days written notice to Licensee of its intention to terminate, at the end of which time all the rights hereunder of the Licensee shall terminate, unless the default, which shall have been stated in such notice, shall have been cured within such 30 days of receipt of such notice. Notwithstanding the foregoing, Licensee shall be allowed only two notices of default hereunder which it may cure within the time specified in this section. The third notice shall be final and shall at the option of City (1) cancel and terminate all of the rights hereunder of the Licensee, and the City may, upon the date specified in such third notice, reenter the Licensed Property and remove therefrom all property of the Licensee and store the same at the expense of the Licensee, or (2) elect to proceed under subparagraph (c) below. City is held to a standard of reasonableness in determining whether the default is a minor or substantial default. Termination may be exercised by City only for a substantial default.

If City elects to terminate, Licensee shall be liable to City for all amounts owing as of the time of termination.

(c) The remedies provided in this Agreement shall be cumulative and shall in no way affect any other remedy available to City under law or equity.

(d) In the event of the City's default, without limiting the Licensee in the exercise of any right or remedy which the Licensee may have by reason of such default, the Licensee may terminate this Agreement and/or pursue any remedy now or hereafter available to it under the Laws or judicial decisions of Colorado.

## **8.03 Dispute Resolution.**

All disputes of whatsoever nature between the City and Licensee regarding this Agreement shall be resolved by administrative hearing, pursuant to the procedure established by

Denver Revised Municipal Code, Section 56-106. For the purpose of that procedure, the City official rendering a final determination shall be the Director.

**8.04 No Waiver.**

No failure of City to insist upon the strict performance of a term, covenant or agreement contained in this Agreement shall be deemed or taken to be a waiver by the City of any succeeding or other breach.

**SECTION 9  
LOSS OF AND LIABILITIES  
PERTAINING TO THE SYSTEM**

**9.01 Damage or Destruction and Restoration.**

In case of damage or loss of all or any portion of the System, the Licensee will give prompt notice thereof to the City; and, except as otherwise provided herein, the Licensee shall promptly commence and complete with due diligence (subject to delays beyond its control), the restoration of the System as nearly as reasonably practicable to the value and condition thereof immediately prior to such damage or destruction. In the event of such damage or destruction, the Licensee shall be entitled to use or receive reimbursement from the proceeds of all property insurance policy or policies for the System and shall be obligated to provide any additional moneys necessary for such restoration.

**9.02 Licensee's Election Not to Restore Damaged Property.**

In case of the damage or destruction of all or any part of the System, Licensee, within 90 days thereafter may elect not to restore or replace the System, and this Agreement shall be terminated. Licensee must notify the City within 90 days of damage or destruction to all or any part of the System of its intentions regarding restoring or replacing its System. Within 180 days after the Licensee elects not to restore or replace the System, the City may restore the Licensed Property at the Licensee's expense as nearly as reasonably practicable to the value and condition thereof immediately prior to the commencement of the acquisition, installation and construction of the System, and the Licensee shall be obligated to reimburse the City for the costs of such restoration, except to the extent any proceeds of insurance in excess of such requirements are available to defray such restoration costs. There shall not be included in the computation of said 180-day period any periods during which it is impracticable for the City to proceed with such restoration because of war, strike or other reason beyond the control of the City.

**SECTION 10  
MISCELLANEOUS PROVISIONS**

**10.01 Force Majeure.**

Neither party hereto shall be liable to the other for any failure, delay or interruption in the performance of any of the terms, covenants or conditions of this Agreement due to causes beyond

the control of that party, including without limitation strikes, boycotts, labor disputes, embargoes, shortages of materials, acts of God, acts of the public enemy, acts of superior governmental authority, weather conditions, floods, riots, rebellion, sabotage or any other circumstance for which such party is not responsible or which is not in its power to control, but in no event shall this paragraph be construed so as to allow Licensee to reduce or abate its obligation to pay the fees herein.

#### **10.02 [Intentionally omitted]**

#### **10.03 Paragraph Headings.**

The paragraph headings herein are for convenience in reference only and are not intended to define or limit the scope of any provision of this Agreement

#### **10.04 Security.**

Should Licensee require access into a secure area, to include but not limited to event and meeting area(s) which may require prior approval or escort, then its employees, agents, directors, officers or subcontractors requiring such access must obtain proper Licensee ID badge(s) as required by the Director in order to have such access. City is not required to escort Licensee, its employees, agents, directors, officers or subcontractors, but may elect to do so at Licensee's expense based on unusual circumstances.

It is understood and agreed by Licensee that in addition to Licensee's responsibilities to maintain the Property as provided herein, it shall take reasonable security precautions to maintain the Property in a manner as to keep it secure from unauthorized intrusion.

#### **10.05 Third Parties.**

This Agreement does not, and shall not be deemed or construed to, confer upon or grant to any third party or parties any right to claim damages or to bring any suit, action or other proceeding against either the City or the Licensee because of any breach hereof or because of any of the terms, covenants, agreements and conditions herein.

#### **10.06 Notices.**

All legal and administrative notices hereunder shall be given to the following by hand delivery or by certified mail, return receipt requested:

City:  
Manager of Finance  
City and County of Denver  
201 W. Colfax Avenue, Dept. 1010  
Denver, CO 80202  
Attention: Real Estate

and

City and County of Denver  
Director, Arts & Venues Denver  
1345 Champa Street  
Denver, CO 80204

With a copy of such notice to:  
Denver City Attorney's Office  
1437 Bannock St., Room 353  
Denver, Colorado 80202

Licensee:  
Verizon Wireless (VAW) LLC  
d/b/a Verizon Wireless  
180 Washington Valley Road  
Bedminster, New Jersey 07921  
Attn: Network Real Estate

Licensee and City shall designate local contact personnel for operational and otherwise day-to-day business communications. Any changes to this contact information shall be provided immediately once known.

#### **10.07 City and County of Denver Law and Venue.**

This Agreement and performance hereunder shall be deemed to have been made in and shall be governed by and construed in accordance with the laws of the City and County of Denver. Venue for any action to enforce the provisions of this Agreement shall be in the District Court in and for the City and County of Denver.

#### **10.08 Examination of Records.**

Licensee agrees that any duly authorized representative of the City, including the City Auditor or his representative, shall, until the expiration of three (3) years after the final payment under this Agreement, have access to and the right to examine Licensee, any directly pertinent books, documents, papers and records of the Licensee, involving transactions related to this Agreement.

#### **10.09 Parties' Obligation Regarding Confidential Information.**

The Parties agree that issues governing the use and disclosure of Confidential Information, as defined below, provided to or made available to the City by Licensee will be governed by the following provisions:

(a) Definition of Confidential Information. As used in this Agreement, the term "Confidential Information" means all information, of any nature and in any form, regardless of when given, that (i) is disclosed or provided by or through Licensee to the City pursuant to

performance of this Agreement, including but not limited to documents referenced in subsection (e) hereof; and (ii) has been clearly marked or indicated in writing as being confidential by Licensee. Information falling within this definition shall be treated by the City as confidential proprietary information of Licensee pursuant to the provisions of the Colorado Open Records Act and under any rule of court. Information not so marked or indicated will not be so considered.

(b) Use of Confidential Information. Except as expressly provided in this Agreement or as otherwise mandated by the Colorado Open Records Act, or other applicable law, the City will not disclose Confidential Information to anyone without the prior written consent of Licensee. The City will not use, or permit others to use, Confidential Information for any purpose other than actions incidental to the performance and enforcement of this Agreement between the City and Licensee, including but not limited to auditing of records of Licensee by the City Auditor and/or other representatives of the City. The City will take all reasonable measures to avoid disclosure, dissemination or unauthorized use of Confidential Information, including, at a minimum, those measures that it takes to protect its own Confidential Information of a similar nature.

(c) Open Records Requests. The Parties recognize that the mere marking of a document as “Confidential” does not render it conclusively confidential under the Colorado Open Records Act. Consequently, in the event that the City is served with an Open Records Request or subpoena from any third party requesting all or part of any Confidential Information as defined herein, the City shall give timely notice to Licensee of such request or subpoena within the time parameters of the Colorado Open Records Act or of any applicable court rule. In that event, Licensee agrees upon receipt of actual notice from the City of such Open Records Request or subpoena to immediately undertake to defend such Confidential Information from disclosure pursuant to the Colorado Open Records Act or applicable court rule and shall defend, save and hold harmless and indemnify the City and its agents and employees with respect to such issues.

(d) Licensee shall not at any time or in any manner, either directly or indirectly, divulge, disclose or communicate to any person, firm or corporation in any manner whatsoever any information concerning any matters which are not subject to public disclosure, including without limitation the trade secrets of businesses or entities doing business with the City and other privileged or confidential information.

#### **10.10 Entire Agreement.**

The parties acknowledge and agree that the provisions contained herein, including all exhibits attached hereto, constitute the entire agreement and that all representations made by any officer, agent or employee of the respective parties unless included herein are null and void and of no effect. No alterations, amendments, changes or modifications, unless expressly reserved to the City herein, shall be valid unless executed by an instrument in writing by all the parties with the same formality as this Agreement.

#### **10.11 Time of Essence.**



The parties agree that in the performance of the terms and requirements of this Agreement by Licensee and the City, time is of the essence.

**10.12 Nondiscrimination.**

In connection with the performance of work under the Agreement, the Licensee may not refuse to hire, discharge, promote or demote, or discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, gender identity or gender expression, marital status, or physical or mental disability. The Licensee shall insert the foregoing provision in all subcontracts hereunder.

**10.13 City's Execution of Agreement.**

This Agreement is expressly subject to, and shall not be or become effective or binding on the City until executed by all required City signatories.

**10.14 Electronic Signatures.**

The Licensee consents to the use of electronic signatures by the City. This Agreement, and any other documents requiring a signature under this Agreement, may be signed electronically by the City in the manner specified by the City. The Parties agree not to deny the legal effect or enforceability of the Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Agreement in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

**[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK**

**Contract Control Number:**

IN WITNESS WHEREOF, the parties have set their hands and affixed their seals at Denver, Colorado as of

SEAL

**CITY AND COUNTY OF DENVER**

ATTEST:

By \_\_\_\_\_

\_\_\_\_\_

APPROVED AS TO FORM:

REGISTERED AND COUNTERSIGNED:

By \_\_\_\_\_

By \_\_\_\_\_

By \_\_\_\_\_



**Contract Control Number:** FINAN-201840751-00

**Contractor Name:** Verizon Wireless (VAW) LLC

By: 

Name: Steve LeVar  
(please print)

Title: Director Network Field Engineering  
(please print)

**ATTEST: [if required]**

By: \_\_\_\_\_

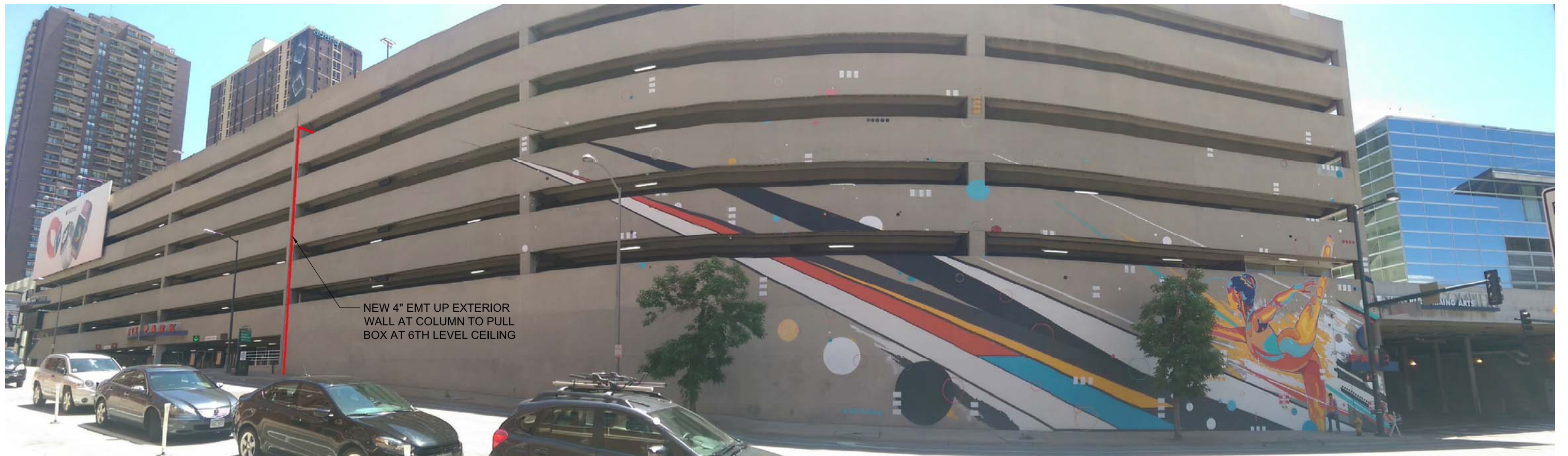
Name: \_\_\_\_\_  
(please print)

Title: \_\_\_\_\_  
(please print)

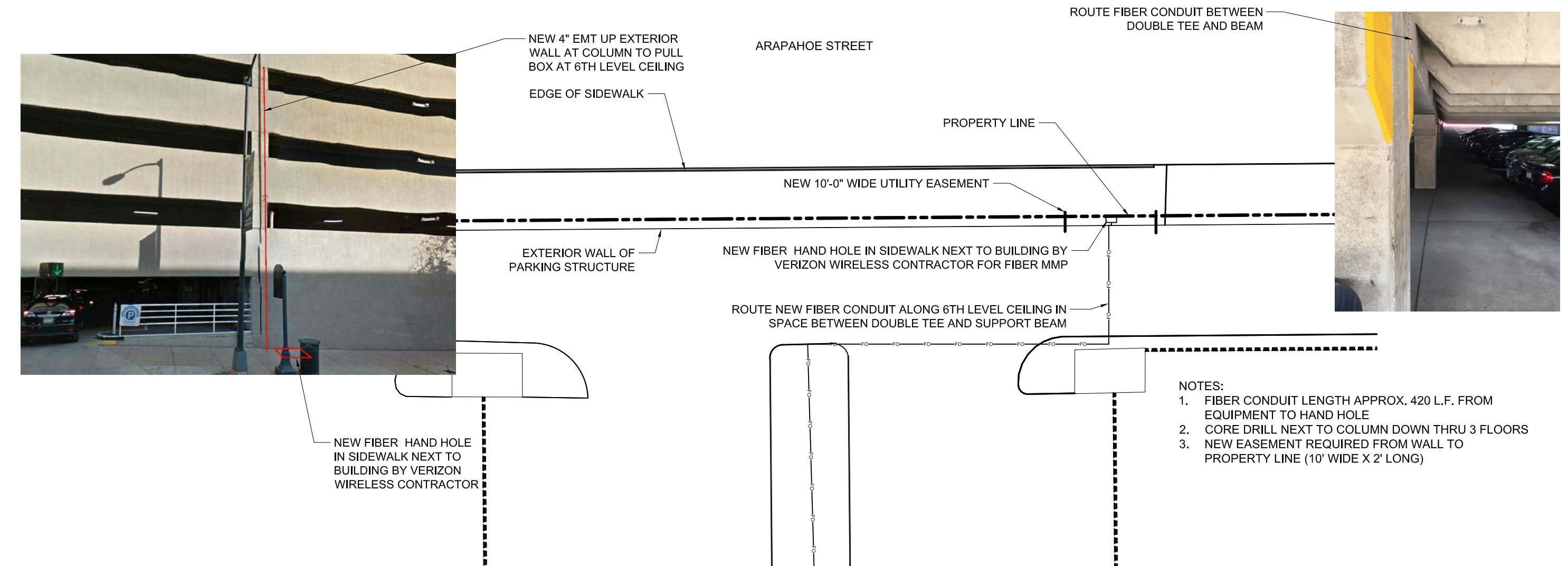


**EXHIBIT A**

**Licensed Area**



NEW 4" EMT UP EXTERIOR WALL AT COLUMN TO PULL BOX AT 6TH LEVEL CEILING



ROUTE FIBER CONDUIT BETWEEN DOUBLE TEE AND BEAM

NEW 4" EMT UP EXTERIOR WALL AT COLUMN TO PULL BOX AT 6TH LEVEL CEILING

ARAPAHOE STREET

EDGE OF SIDEWALK

PROPERTY LINE

NEW 10'-0" WIDE UTILITY EASEMENT

EXTERIOR WALL OF PARKING STRUCTURE

NEW FIBER HAND HOLE IN SIDEWALK NEXT TO BUILDING BY VERIZON WIRELESS CONTRACTOR FOR FIBER MMP

ROUTE NEW FIBER CONDUIT ALONG 6TH LEVEL CEILING IN SPACE BETWEEN DOUBLE TEE AND SUPPORT BEAM

NEW FIBER HAND HOLE IN SIDEWALK NEXT TO BUILDING BY VERIZON WIRELESS CONTRACTOR

NOTES:

1. FIBER CONDUIT LENGTH APPROX. 420 L.F. FROM EQUIPMENT TO HAND HOLE
2. CORE DRILL NEXT TO COLUMN DOWN THRU 3 FLOORS
3. NEW EASEMENT REQUIRED FROM WALL TO PROPERTY LINE (10' WIDE X 2' LONG)



**LESSOR'S LEGAL DESCRIPTION**

A PARCEL OF LAND BEING LOCATED IN THE SOUTHEAST QUARTER OF SECTION 33, TOWNSHIP 3 SOUTH, RANGE 68 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY AND COUNTY OF DENVER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS

BEGINNING AT THE MOST NORTHERLY CORNER OF BLOCK 100, EAST DENVER, ORIGINALLY RECORDED IN THE BOOK OF MAPS AT PAGE 1 IN THE CLERK AND RECORDER'S OFFICE OF ARAPAHOE COUNTY, NOW CLERK AND RECORDER'S OFFICE OF THE CITY AND COUNTY OF DENVER;  
 THENCE SOUTH 45°26'48" EAST, A DISTANCE OF 314.58 FEET, ALONG THE NORTHEASTERLY LINE OF SAID BLOCK 100 AND SAID LINE EXTENDED,  
 THENCE SOUTH 44°35'09" WEST, A DISTANCE OF 139.41 FEET, THENCE NORTH 45°24'51" WEST, A DISTANCE OF 18.00 FEET, THENCE SOUTH 44°35'09" WEST, A DISTANCE OF 204.78 FEET, THENCE NORTH 45°24'51" WEST, A DISTANCE OF 20.50 FEET, THENCE SOUTH 44°35'09" WEST, A DISTANCE OF 55.85 FEET, THENCE NORTH 45°25'22" WEST, A DISTANCE OF 13.38 FEET, THENCE SOUTH 44°35'09" WEST, A DISTANCE OF 11.00 FEET, THENCE NORTH 45°26'55" WEST, A DISTANCE OF 262.81 FEET, THENCE NORTH 44°36'03" EAST, A DISTANCE OF 411.02 FEET, ALONG THE SOUTHWESTERLY EXTENSION OF THE NORTHWESTERLY LINE OF SAID BLOCK 100 AND ALONG SAID NORTHWESTERLY LINE TO THE POINT OF BEGINNING

**LESSEE UTILITY EASEMENT LEGAL DESCRIPTION**

A 10.00 FOOT WIDE STRIP OF LAND BEING A PORTION OF CITY TRACT PARCEL B ACCORDING TO RECORD NUMBER 2001103862, DENVER COUNTY RECORDS, LYING 5.00 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

BEGINNING AT THE MOST NORTHERLY CORNER OF BLOCK 100, EAST DENVER, ORIGINALLY RECORDED IN THE BOOK OF MAPS AT PAGE 1 IN THE CLERK AND RECORDER'S OFFICE OF ARAPAHOE COUNTY, NOW CLERK AND RECORDER'S OFFICE OF THE CITY AND COUNTY OF DENVER, THENCE SOUTH 44°35'16" WEST ALONG THE WESTERLY LINE OF SAID BLOCK 100, 206.67 FEET TO THE POINT OF BEGINNING

THENCE DEPARTING SAID WESTERLY LINE SOUTH 45°24'56" EAST, 2.03 FEET TO THE POINT OF TERMINUS

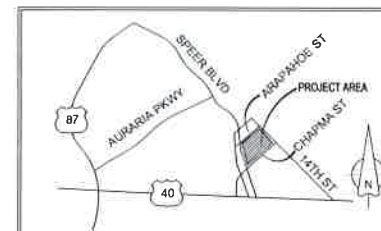
SIDELINES SHALL BE LENGTHENED OR SHORTENED TO FORM ONE CONTIGUOUS PARCEL

**SURVEYOR NOTES**

1. A TITLE REPORT WAS NOT PROVIDED AT THE TIME OF THE SURVEY
2. SURVEYOR HAS NOT PERFORMED A SEARCH OF PUBLIC RECORDS TO DETERMINE ANY DEFECT IN TITLE
3. THE BOUNDARY SHOWN HEREON IS PLOTTED FROM RECORD INFORMATION AND DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE PROPERTY
4. SURVEYOR DOES NOT GUARANTEE THAT ALL UTILITIES ARE SHOWN OR THEIR LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND DEVELOPER TO CONTACT BLUE STAKE AND ANY OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. REMOVAL, RELOCATION AND/OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR

**PROJECT META DATA**

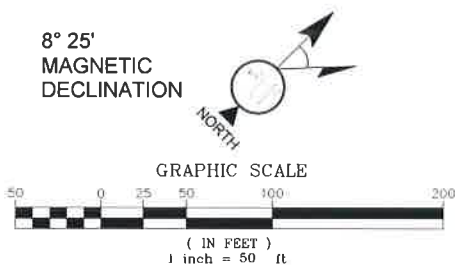
1. ELEVATIONS SHOWN HEREON ARE REPRESENTED IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) ESTABLISHED FROM GPS DERIVED ELLIPSOID HEIGHTS, APPLYING GEOID 09 SEPARATIONS CONSTRAINING TO NGS CORS STATIONS PROVIDED IN THE "ONLINE POSITIONING USER SERVICE" (OPUS) SOLUTION FOR THIS SPECIFIC SITE
2. BEARINGS SHOWN HEREON ARE BASED UPON U.S. STATE PLANE NAD83 COORDINATE SYSTEM COLORADO STATE PLANE COORDINATE ZONE CENTRAL, DETERMINED BY GPS OBSERVATIONS
3. FIELD WORK FOR THIS PROJECT WAS PERFORMED ON 01/05/16



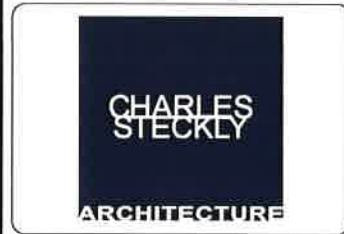
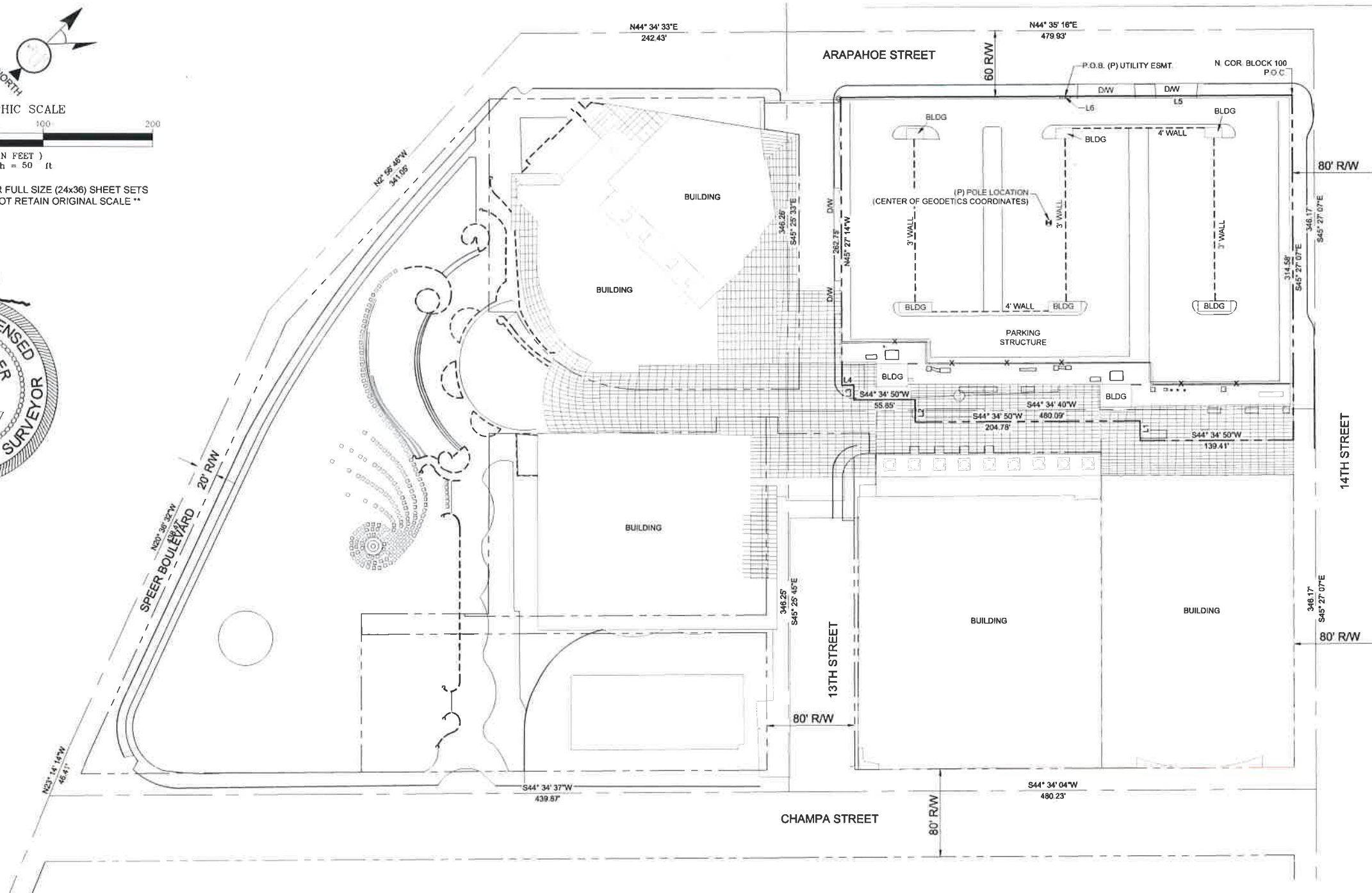
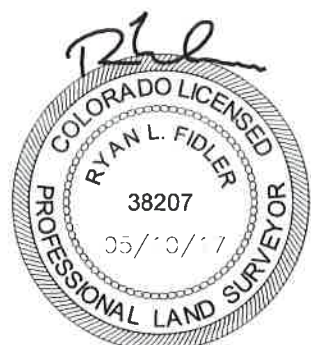
LINE	LENGTH	BEARING
L1	18.00	S45° 25' 10"E
L2	20.50	S45° 25' 10"E
L3	13.38	S45° 25' 41"E
L4	11.00	S44° 34' 50"W
L5	206.67	S44° 35' 16"W
L6	2.03	S45° 24' 56"E

**POSITION OF GEODETIC COORDINATES**

LATITUDE 39° 44' 42.68" NORTH (NAD83)  
 LONGITUDE 104° 59' 57.07" WEST (NAD83)  
 ELEVATION @ GROUND= 5207' (NAVD88)



\*\* SCALE IS INTENDED FOR FULL SIZE (24x36) SHEET SETS REPRODUCTIONS MAY NOT RETAIN ORIGINAL SCALE \*\*



FIELD BY:	JTS
DRAWN BY:	CRS
CHECKED BY:	RLF

REVISIONS		
NO.	DATE	DESCRIPTION
3	06/07/16	FINAL
2	01/29/16	REVISION
1	01/12/16	PRELIMINARY



REUSE OF DOCUMENT  
 THE IDEAS & DESIGN INCORPORATED HEREON, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF RLF CONSULTING, LLC & IS NOT TO BE USED FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF RLF CONSULTING, LLC

PROJECT No.  
**15010002**  
 SITE NAME:  
**DEN DENVER ARTS CENTER**  
 SITE ADDRESS:  
**1040 14TH STREET**  
**DENVER, CO 80202**

SHEET TITLE:  
**BOUNDARY DETAIL**

SHEET NO. <b>LS-1</b>	REVISION:
--------------------------	-----------

PROJECT INFORMATION

SITE NAME  
**DEN DENVER ARTS CENTER**  
 SITE ADDRESS  
 1040 14TH STREET  
 DENVER, CO 80202

CONSULTANT

A	01/27/16	CD REVIEW	DPL
1	02/11/16	CONST. CLAR #1	DPL
2	02/19/16	ADDENDUM #1	DPL
3	03/18/16	CONST. CLAR #2	DPL
4	06/06/16	CONST. CLAR #3	DPL
5	05/08/17	CD RE-ISSUE	DPL

1st REVIEW      TN 2nd REVIEW      SGP

**CHARLES STECKLY**  
**ARCHITECTURE**  
 5935 SOUTH ZANG STREET, SUITE 280  
 LITTLETON, COLORADO 80127  
 OFFICE: 303.932.9974

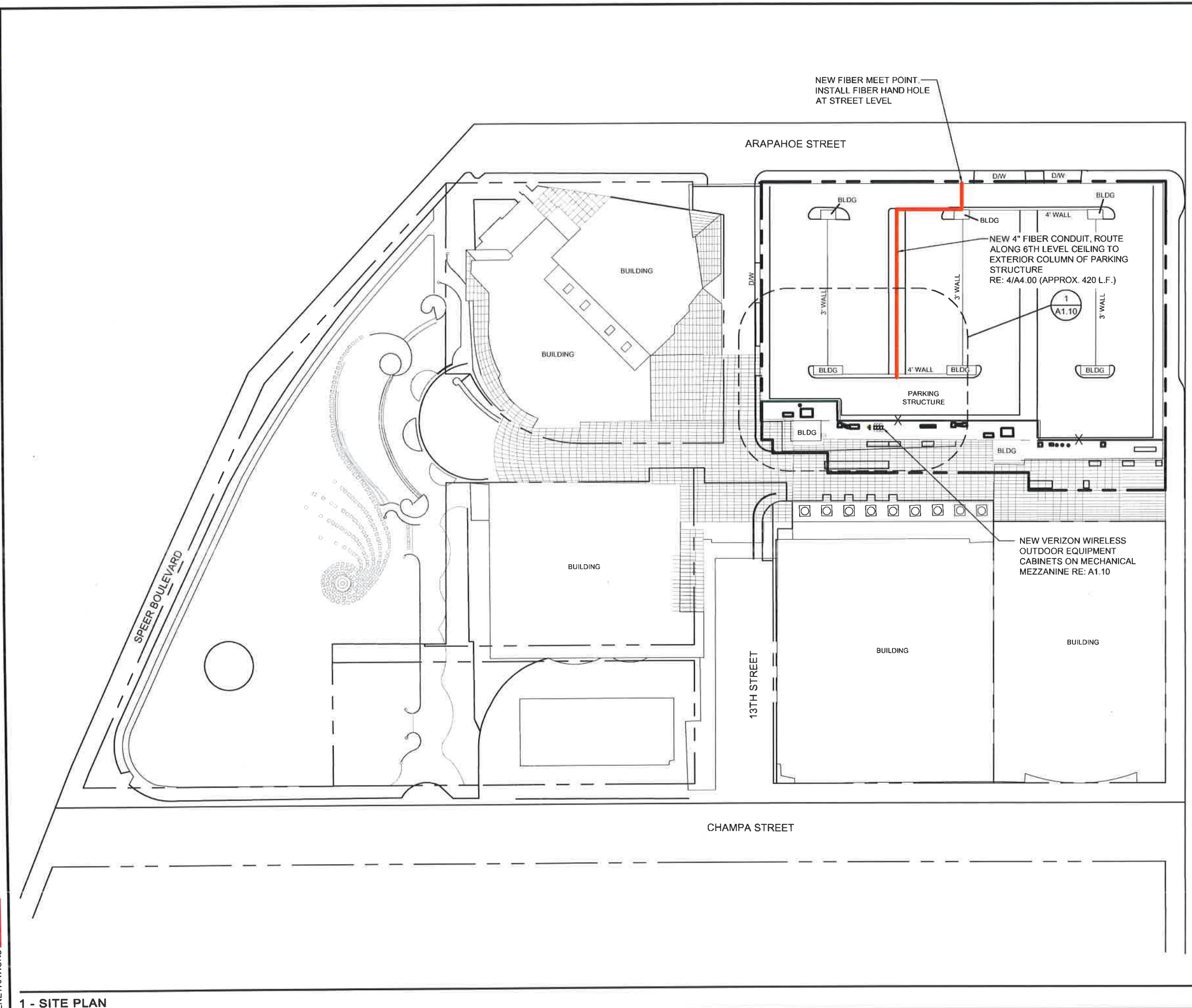


SITE PLAN

**A1.00**



1" = 100'-0"



PENETRATIONS  
 ANTENNAS  
 FIBER  
 POWER/GROUNDING  
 HYBRID & COAX CABLES

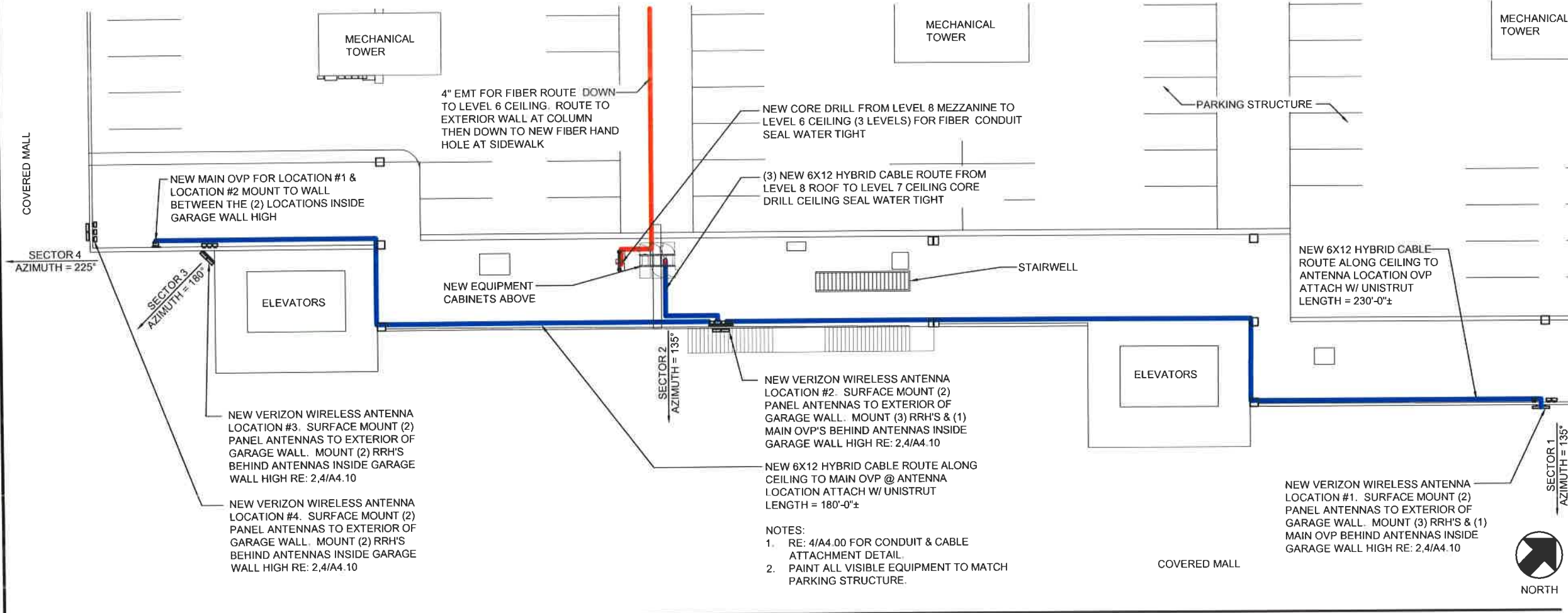
P:\2015\Projects\Verizon Wireless\New Build\DEN Denver Arts Center\CD\A1.00.dwg  
 PLOTTED May 03, 2017 AT 9:16am

1 - SITE PLAN



2 - HYBRID CABLE DIAGRAM

FIBER  
ANTENNAS  
RRH/IBBU  
PENETRATIONS



1 - 7TH LEVEL PARKING GARAGE FLOOR PLAN

SCALE: 1" = 30'-0"

1st REVIEW    TN 2nd REVIEW    SGP

# CHARLES STECKLY

## ARCHITECTURE

5935 SOUTH ZANG STREET, SUITE 280  
LITTLETON, COLORADO 80127  
OFFICE: 303.932.9974



PARTIAL 7TH LEVEL  
PARKING GARAGE  
FLOOR PLAN

# A1.20



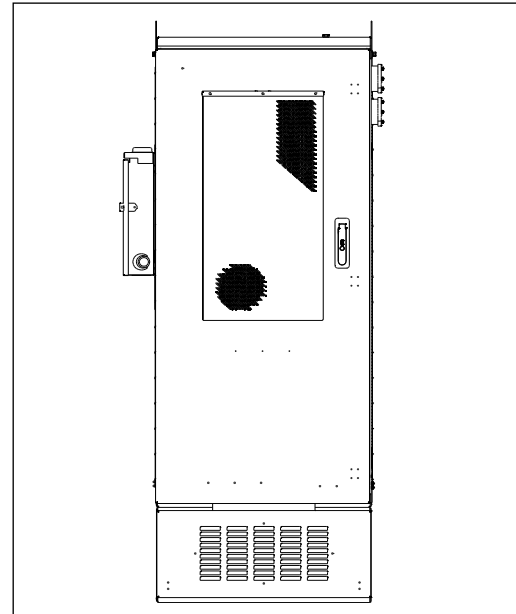


**EXHIBIT B**

**Plans and Specifications**

## Charles Universal Broadband Enclosure (CUBE) CUBE-PM639xxxxx General Description and Installation

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**Figure 1 Closed View of a CUBE with Battery Compartment**

### 1. GENERAL INTRODUCTION

#### 1.1 Document Purpose

This document provides general information for the CUBE-PM639xxxxx of the Charles Industries' Universal Broadband Enclosure (CUBE). These enclosures are intended for pad- or grate-mounted applications and come in 24V or -48V configurations. The CUBE-PM639xxxxx series enclosures can have an equipment compartment or an equipment and battery compartment (Figure 1). The battery compartment supports one battery tray that accommodates one string of -48V or two strings of 24V batteries. Refer to Table 2 for base model specific configurations.

-NOTE-

*Hereafter, the Charles Universal Broadband Enclosure will be referred to as the "CUBE."*

#### 1.2 Product Purpose

These CUBEs consist of a protective enclosure for an integrated system of electronic components and equipment that can serve copper and fiber interfaces.

#### 1.3 Product Mounting and Location

These enclosures are suitable for outside plant-type (OSP) locations and those that may require NEC compliance. These outdoor, weather-resistant CUBEs are to be mounted on a pad or steel-grate. The installer connects the power, fiber and copper connections. Detailed mounting and installation information is covered in Section 3.

### 2. PRODUCT DESCRIPTION

This section contains information for the CUBE's physical design and interior components. This practice covers the base models of the CUBE-PM639xxxxx family, which include

PM63912JN1	PM63922RF2
PM63921JF1	PM63922RF4
PM63922JN1	PM63922RN1
PM63922IC1	PM63912UC1
PM63922LN1	PM63922UN1
PM63912MC1	PM63922WC1
PM63922MC1	PM63912YN1

Base models typically do not have power systems. Physical dimensions for the base models are shown in Figures 2 through 10. Views of one- and two-door CUBE dimensions are shown in Figure 11. The components of CUBE base models are shown in Figures 12 through 25.

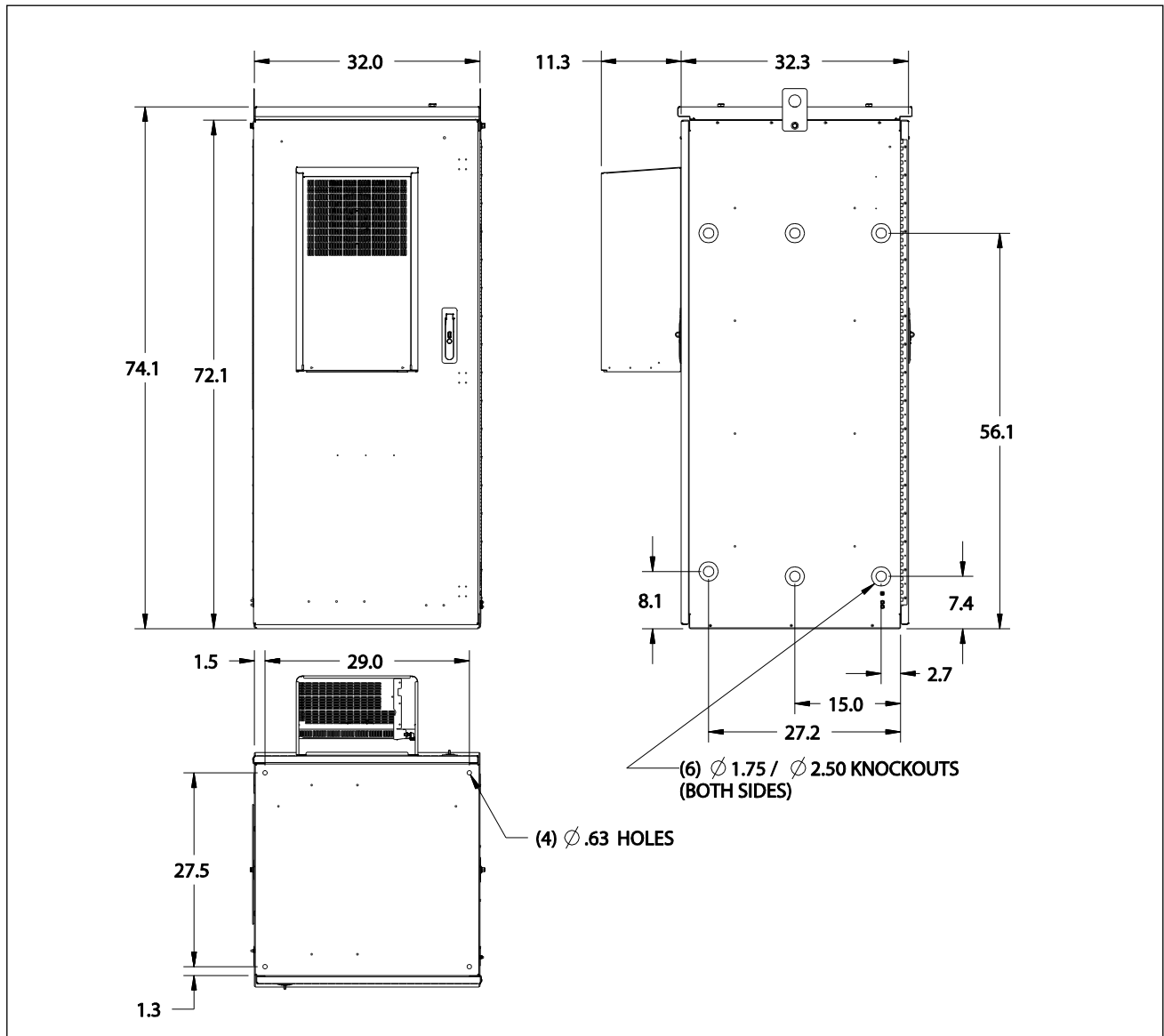


Figure 2 PM63912JN1 Dimensions (in inches)

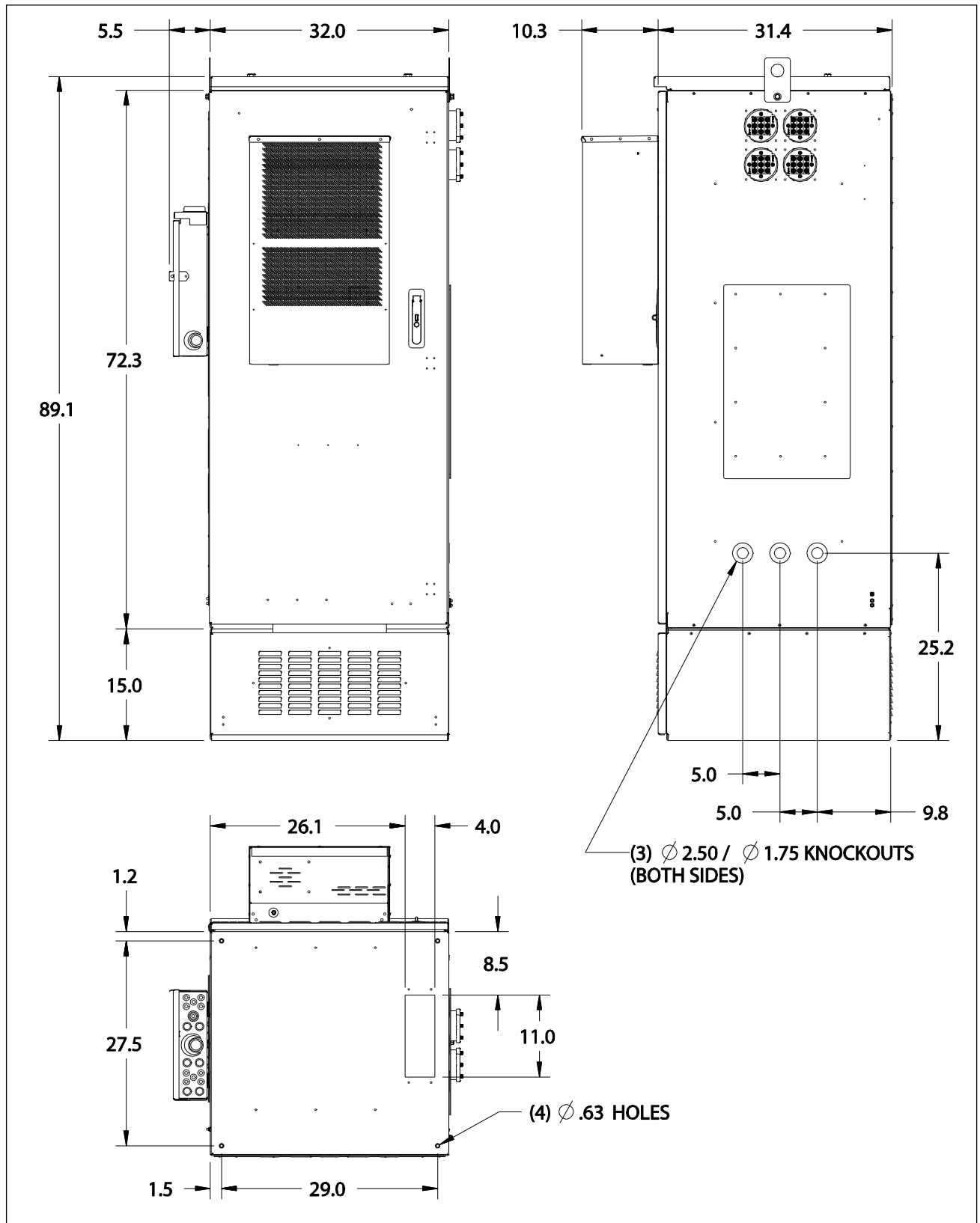


Figure 3 PM63921JF1 Dimensions (in inches)

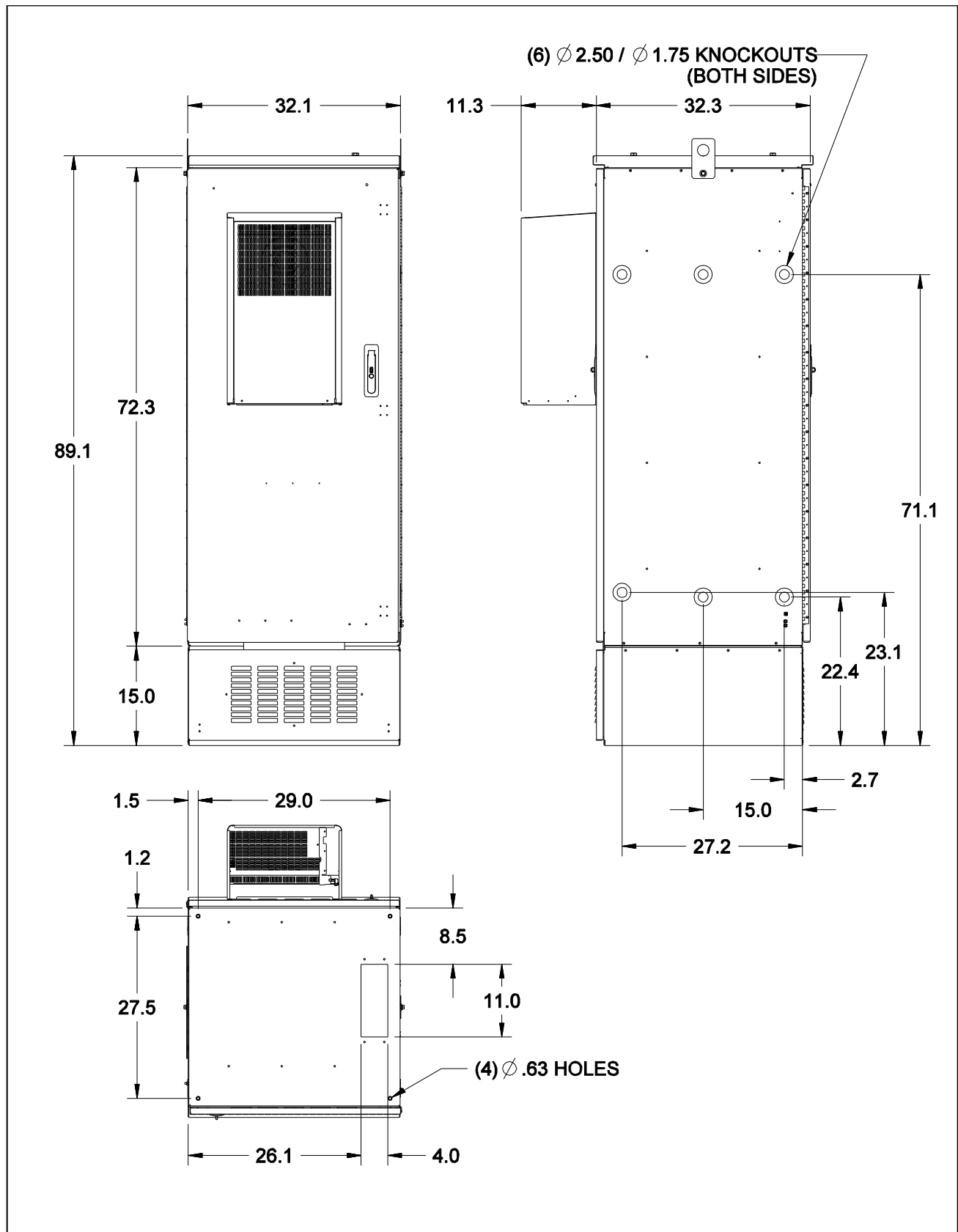


Figure 4 PM63922JN1 Dimensions (in inches)

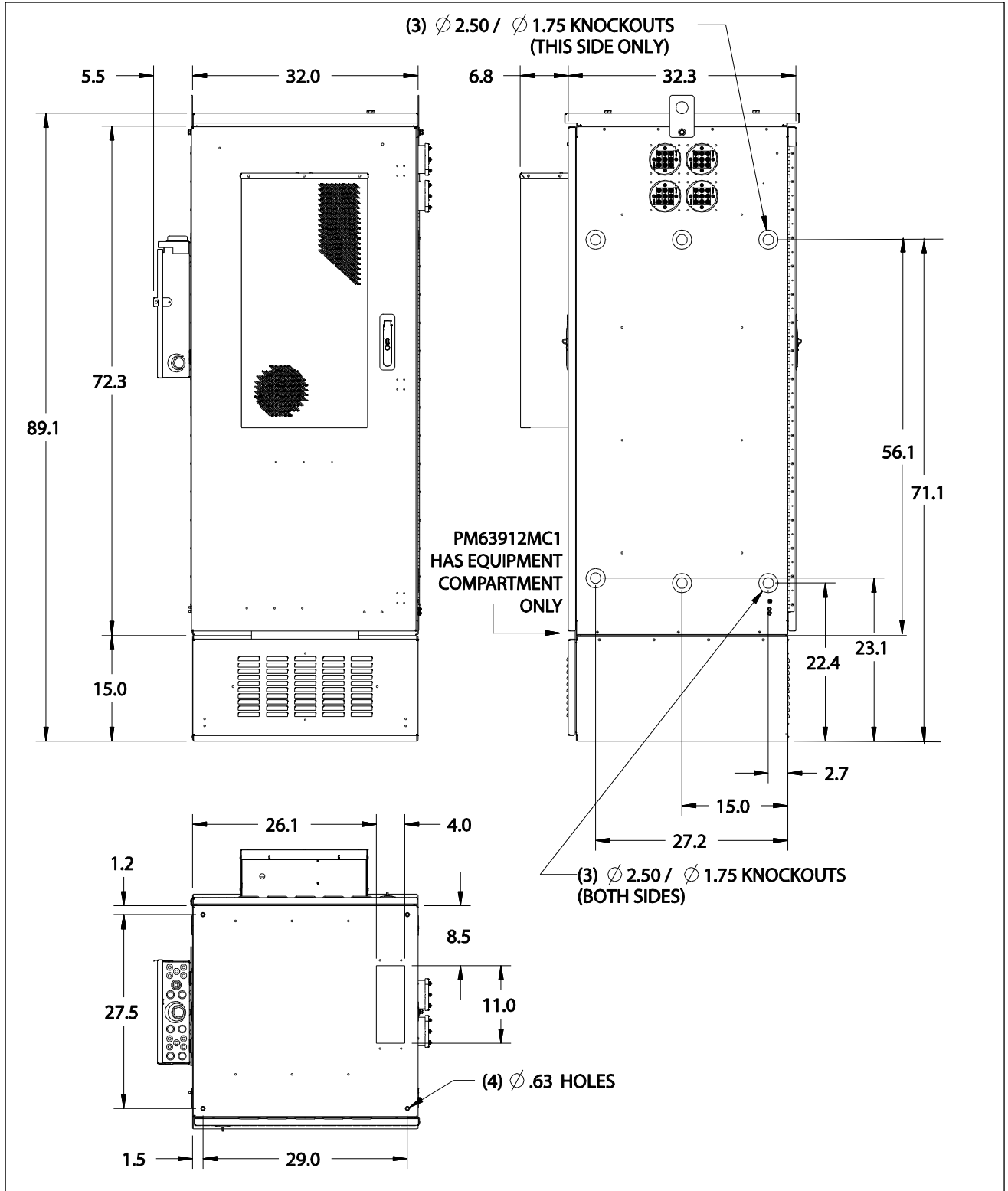


Figure 5 PM63922IC1, PM63912MC1 and PM63922MC1 Dimensions (in inches)

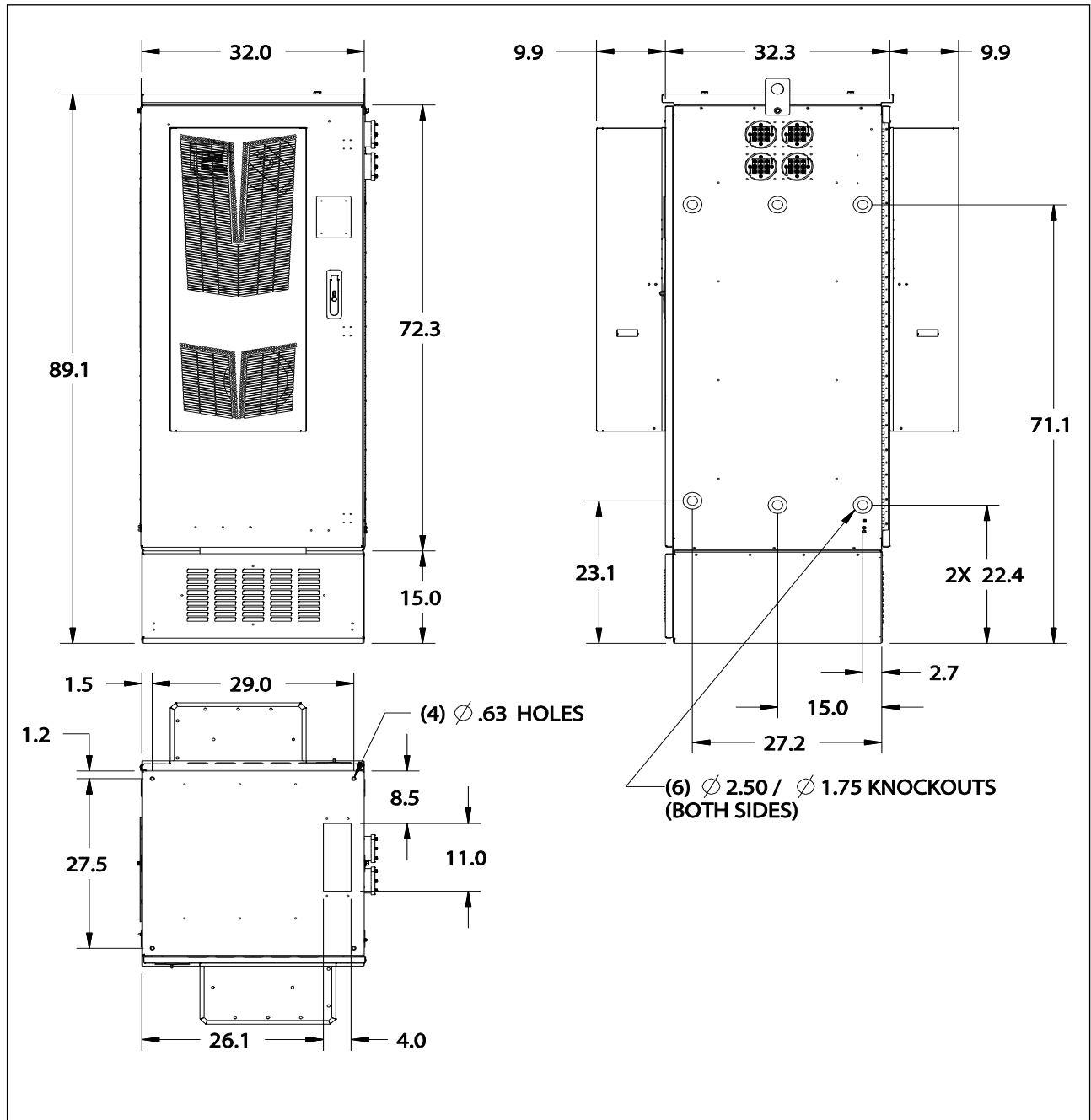


Figure 6 PM63922LN1 Dimensions (in inches)

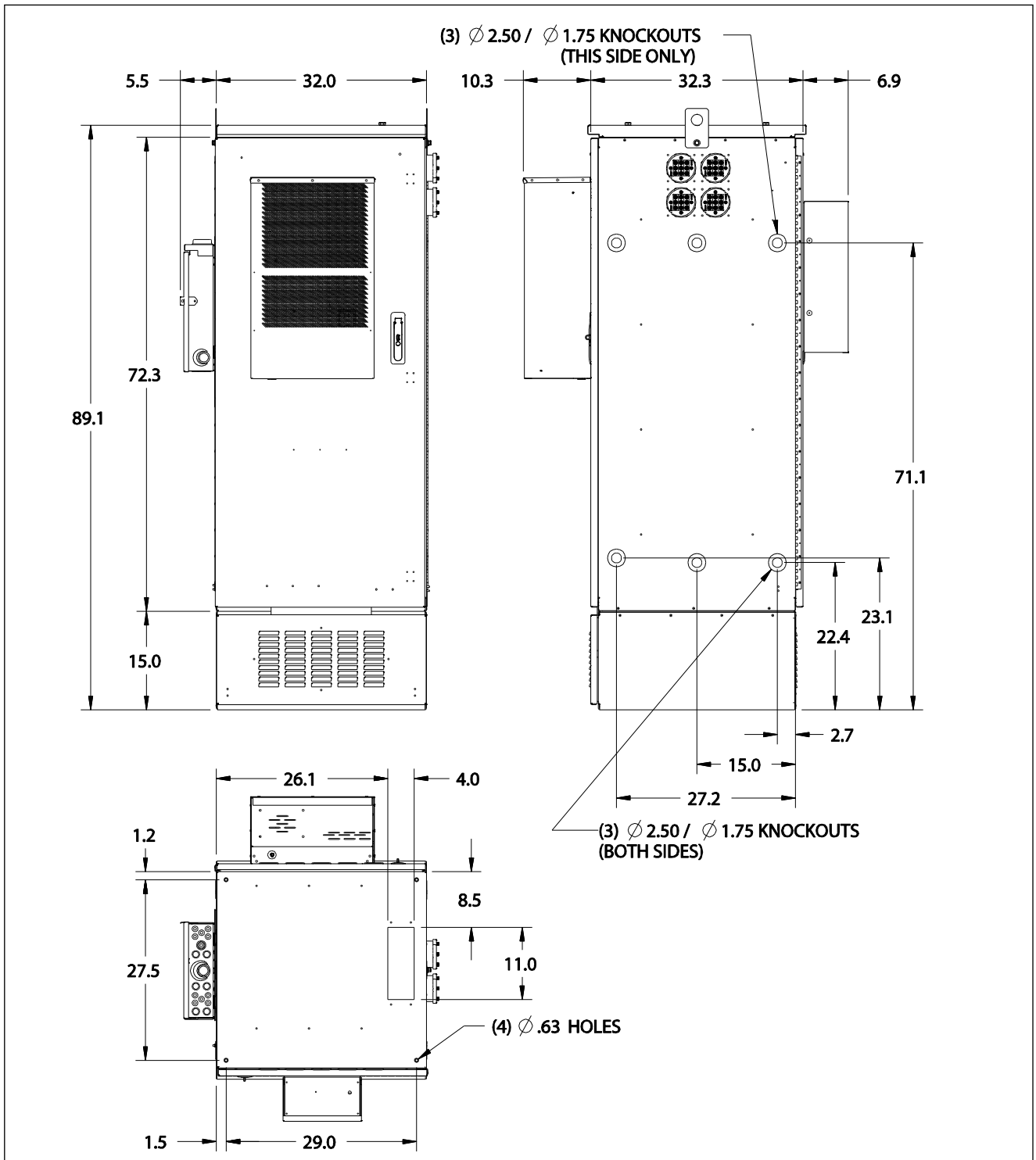


Figure 7 PM63922RF2 and PM63922RF4 Dimensions (in inches)



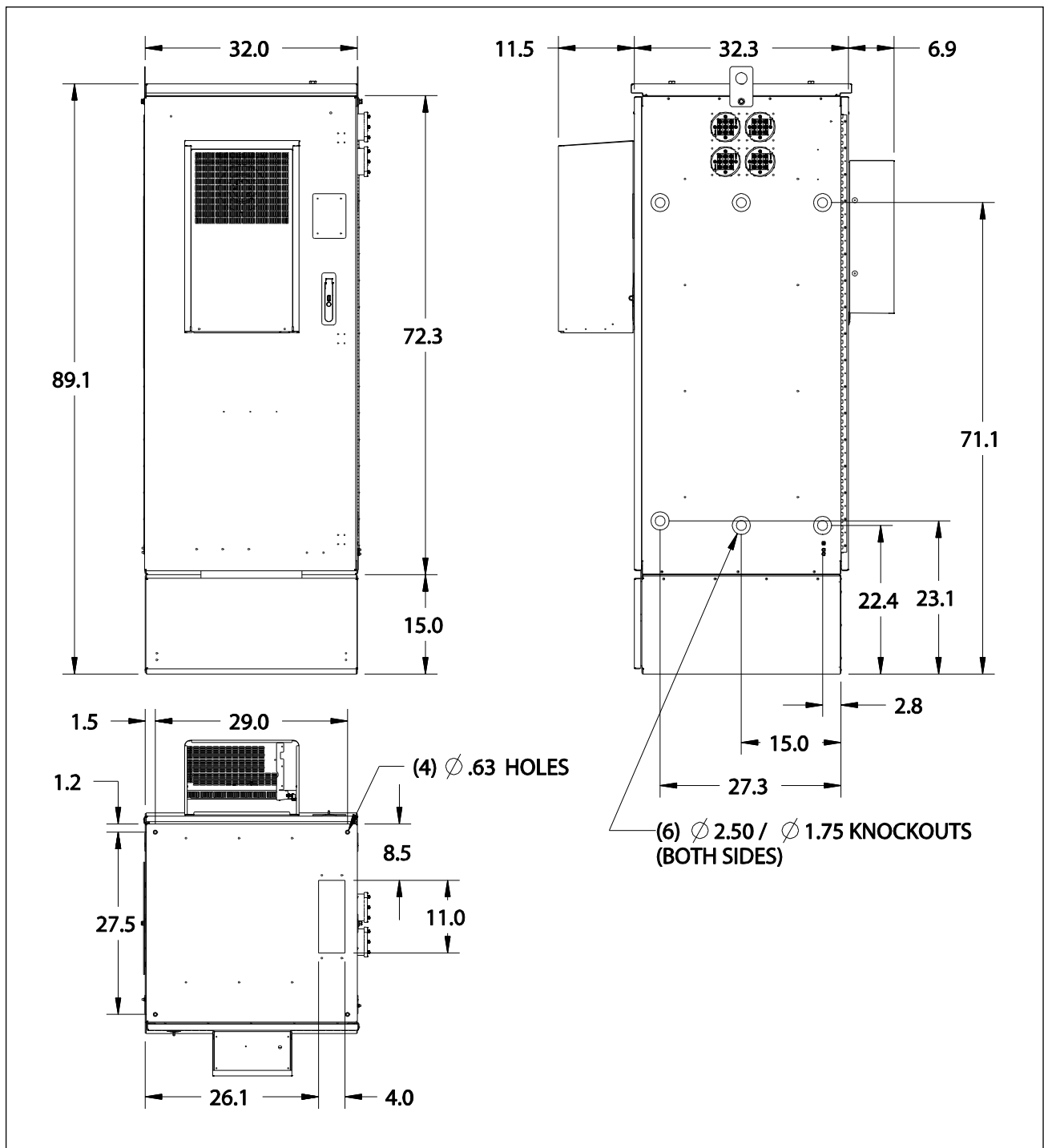


Figure 8 PM63922RN1 Dimensions (in inches)

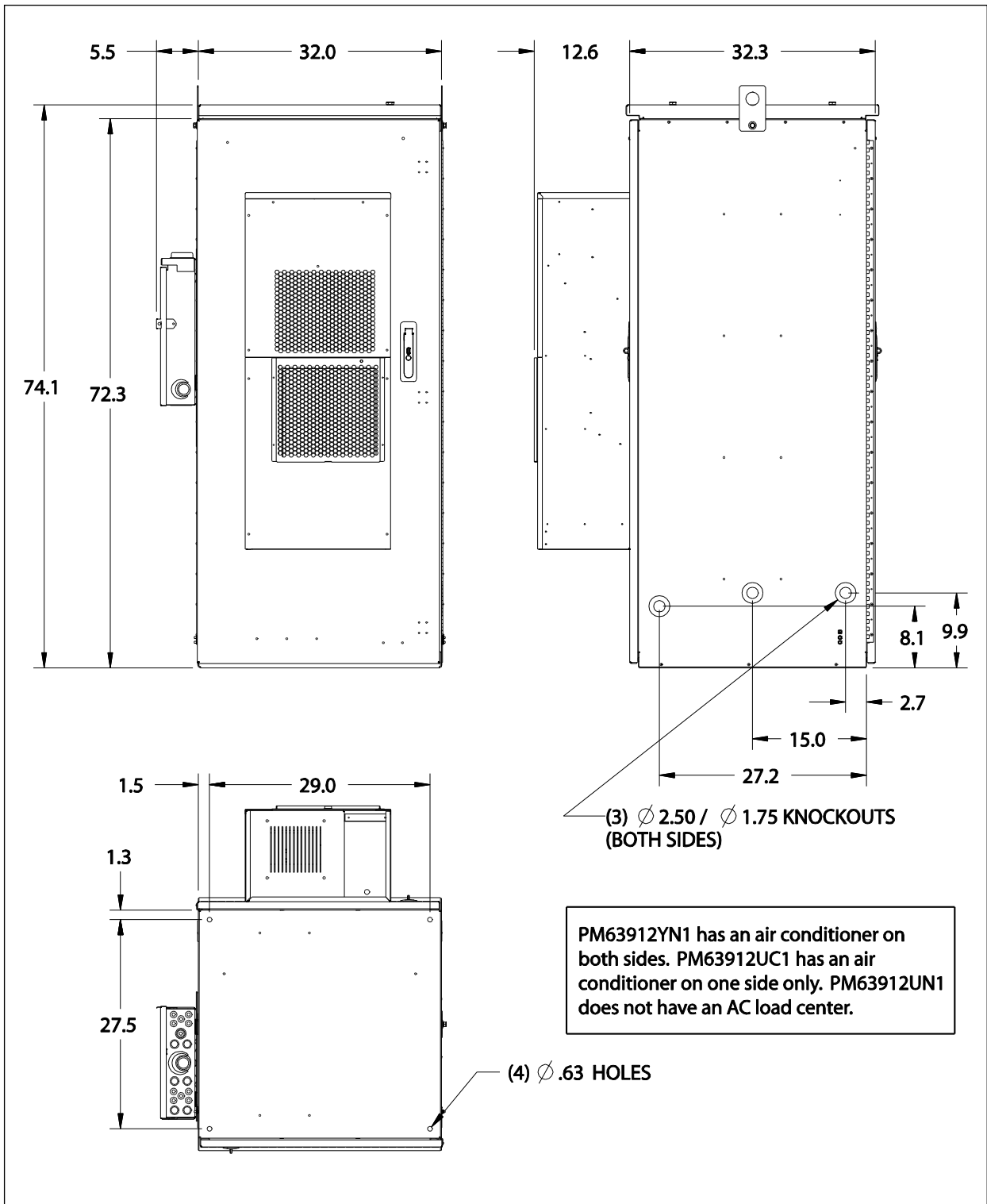


Figure 9 PM63912UC1, PM63912UN1 and PM63912YN1 Dimensions (in inches)

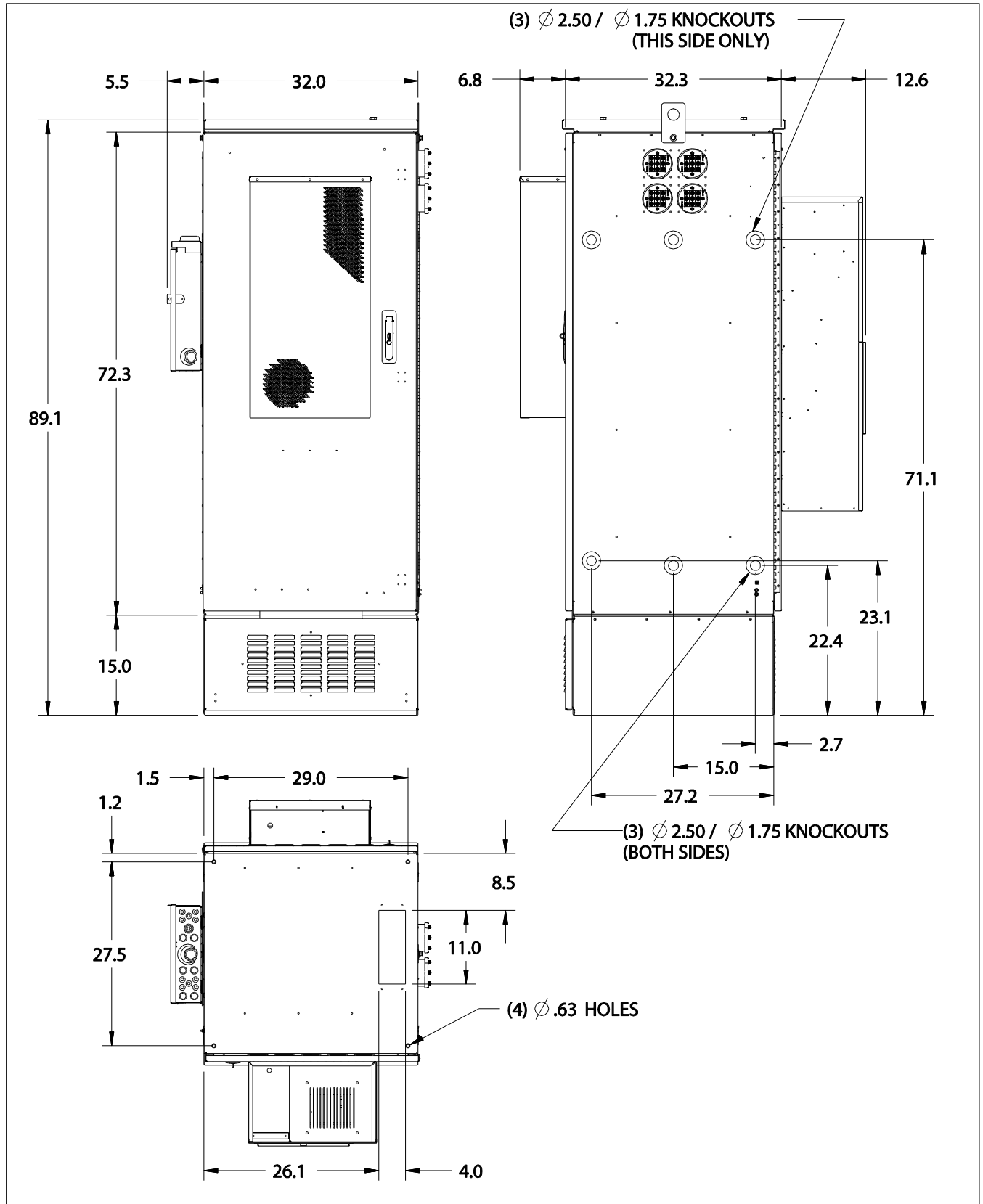
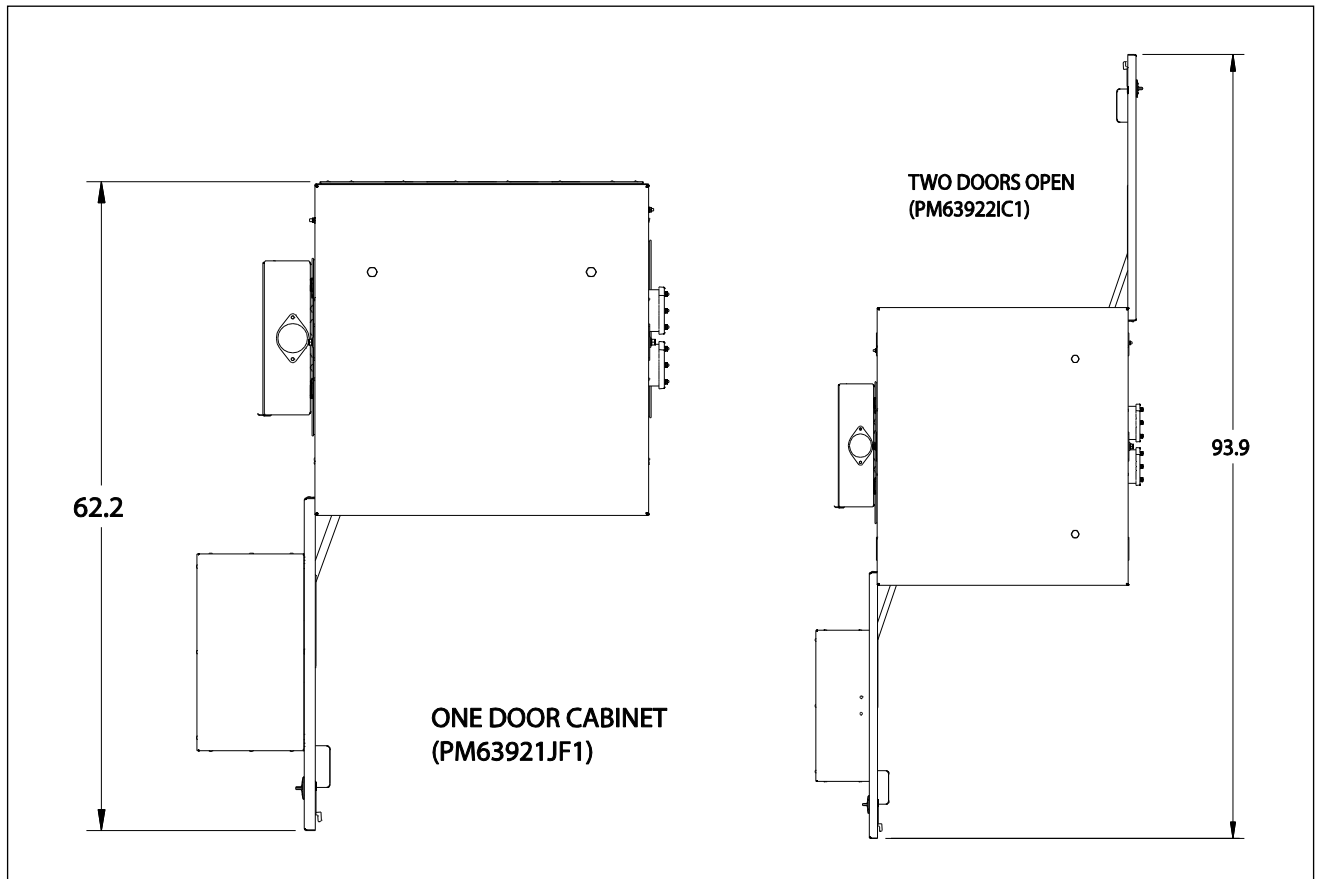


Figure 10 PM63922WC1 Dimensions (in inches)



**Figure 11 PM639xxxxx Open Door Dimensions (in inches)**

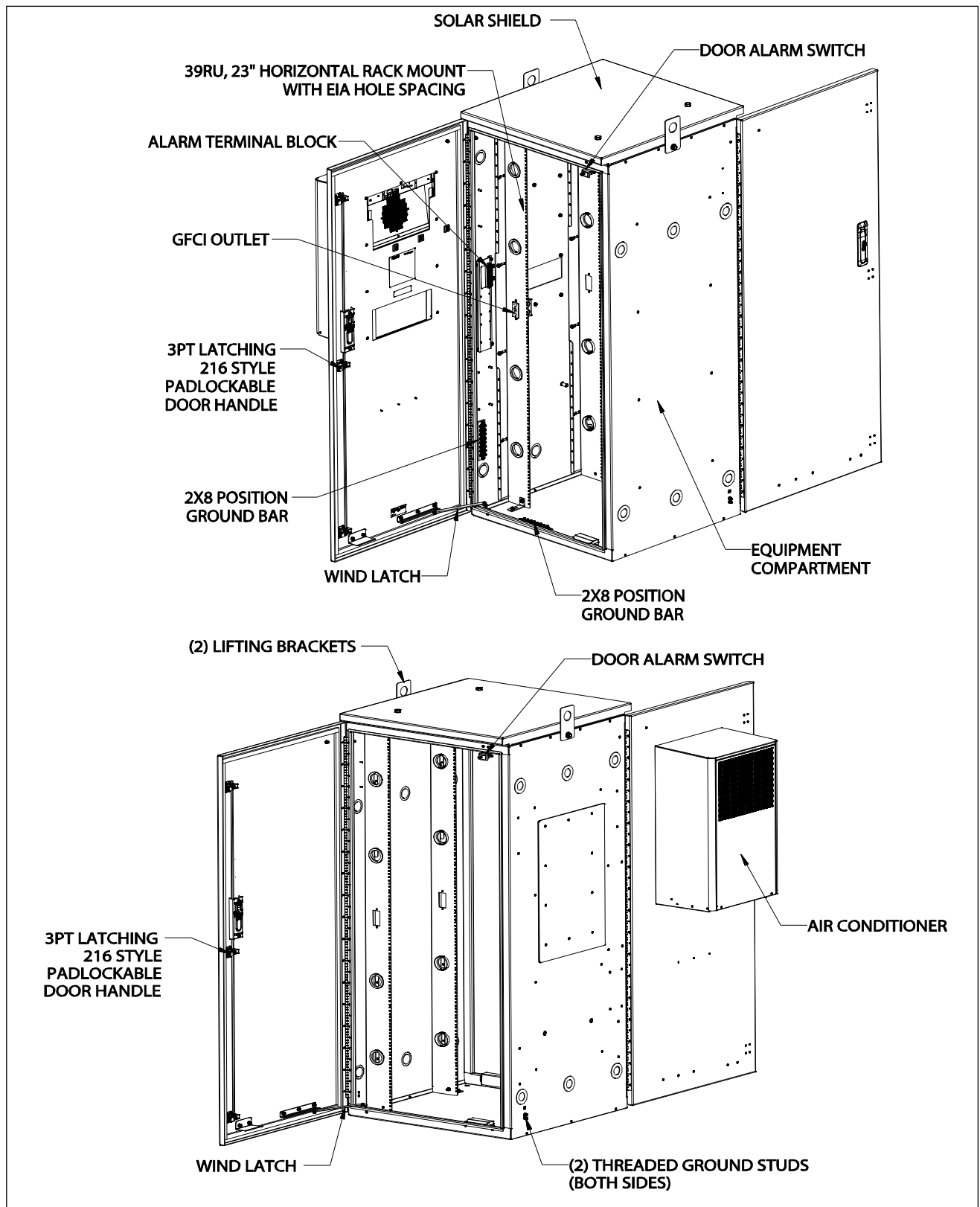


Figure 12 PM63912.JN1 Components

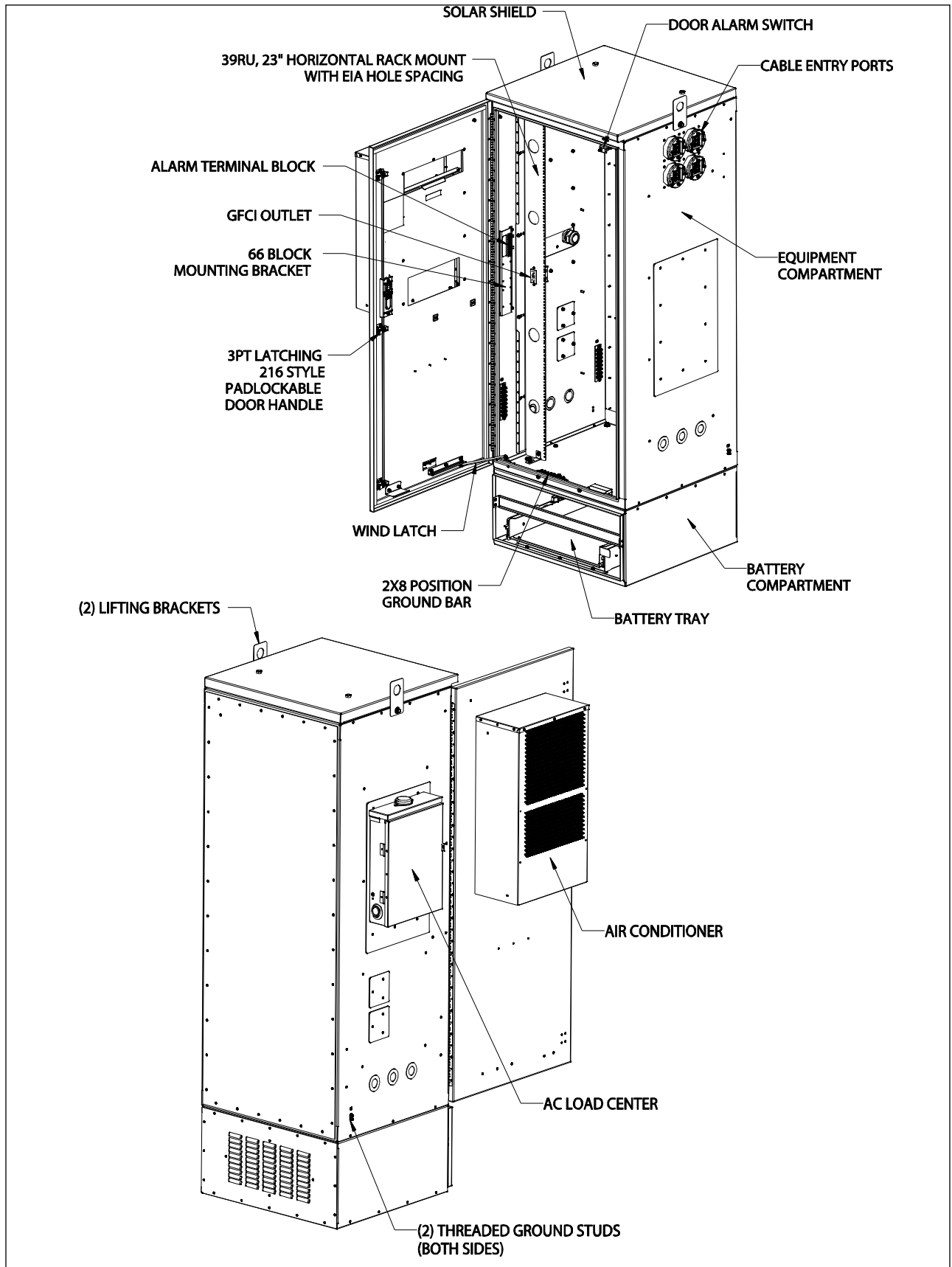


Figure 13 PM63921JF1 Components

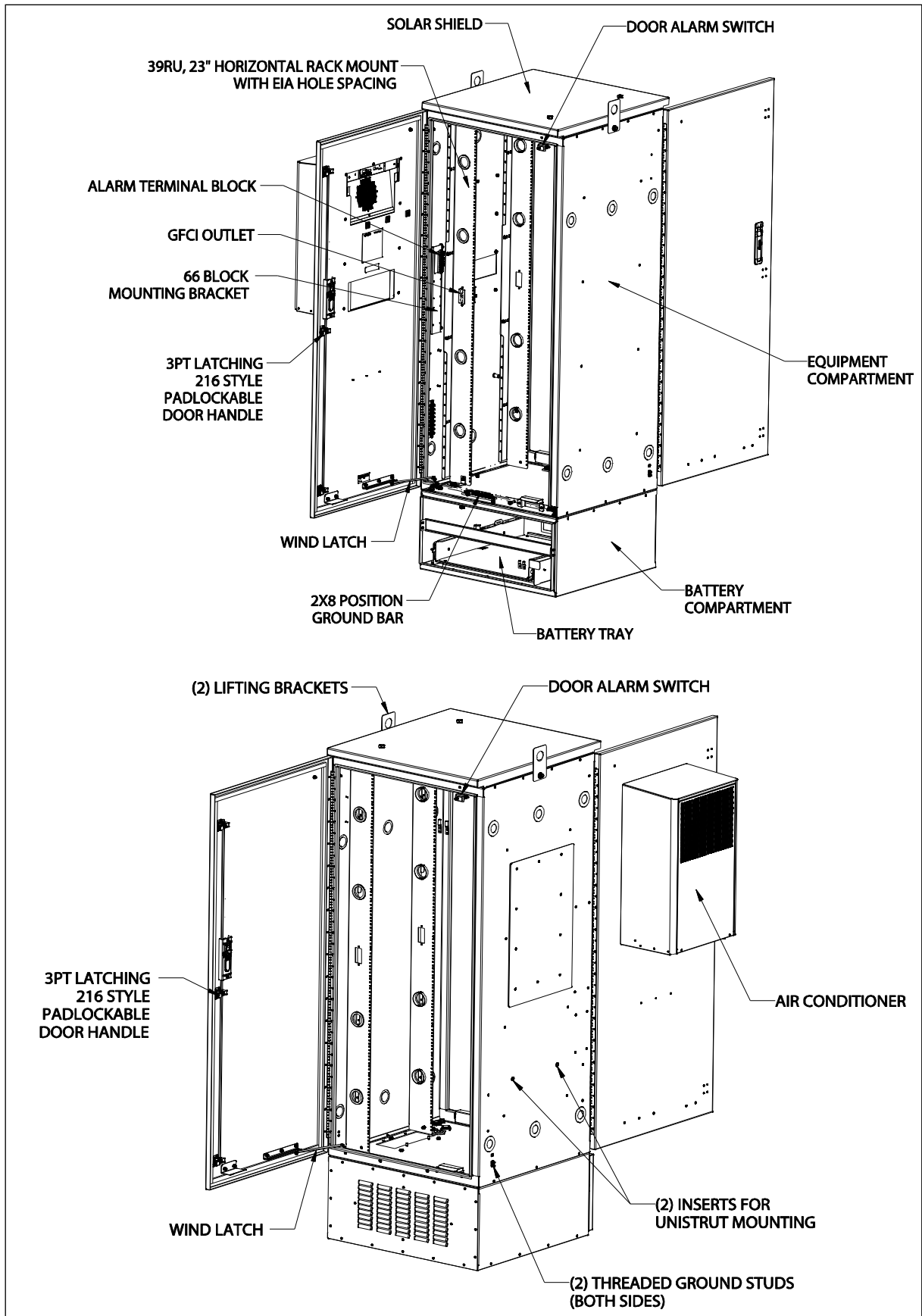


Figure 14 PM63922JN1 Components

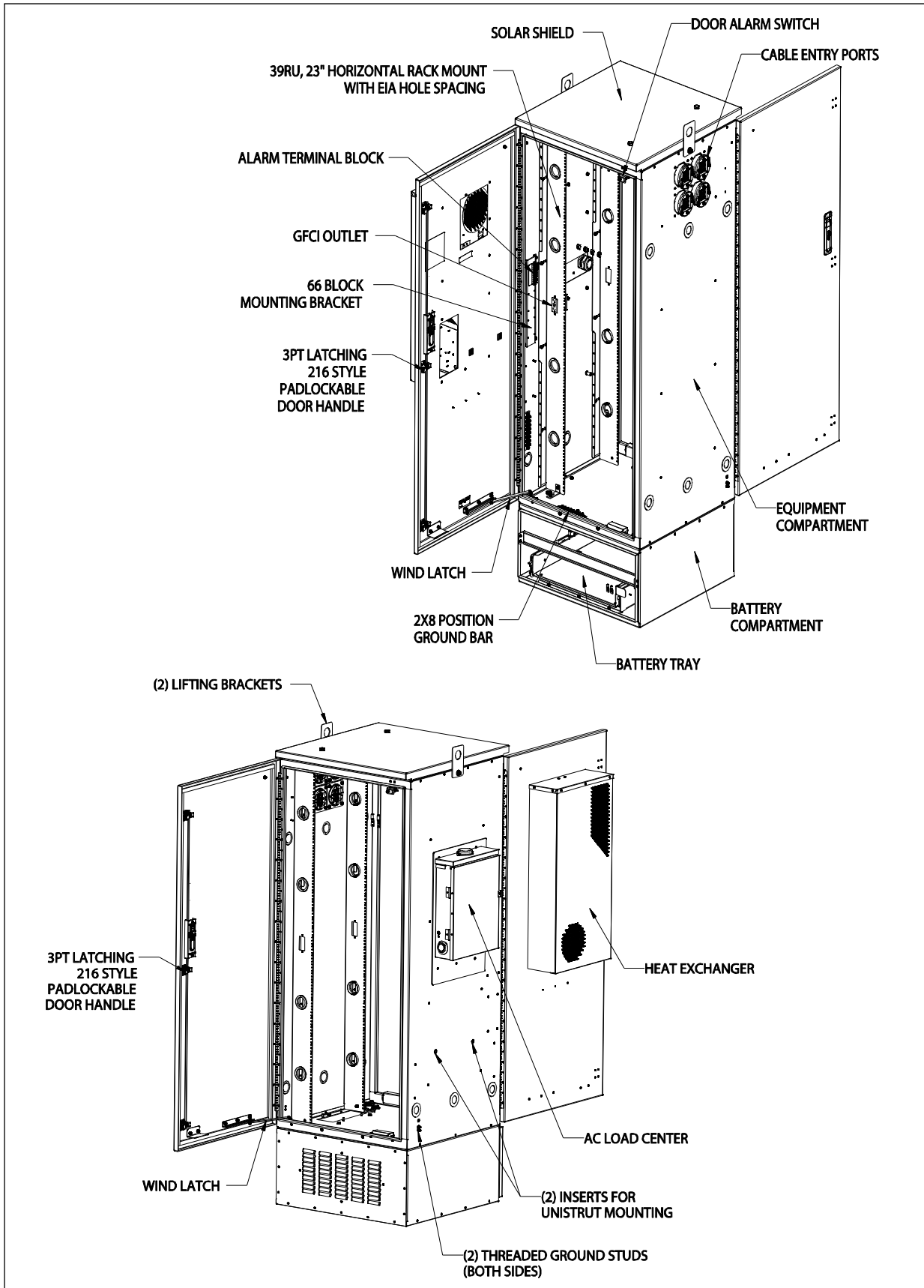


Figure 15 PM63922IC1 Components



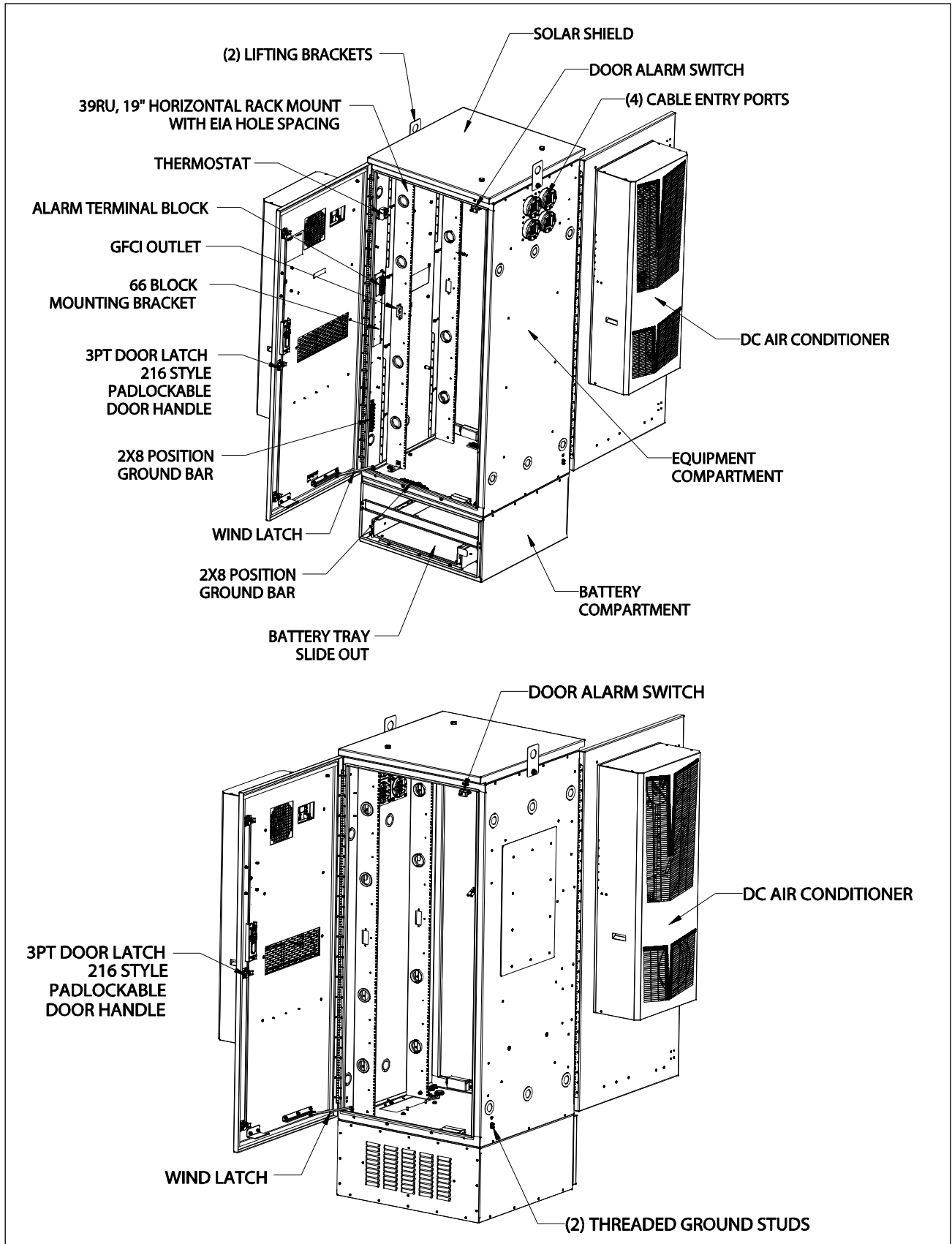


Figure 16 PM63922LN1 Components

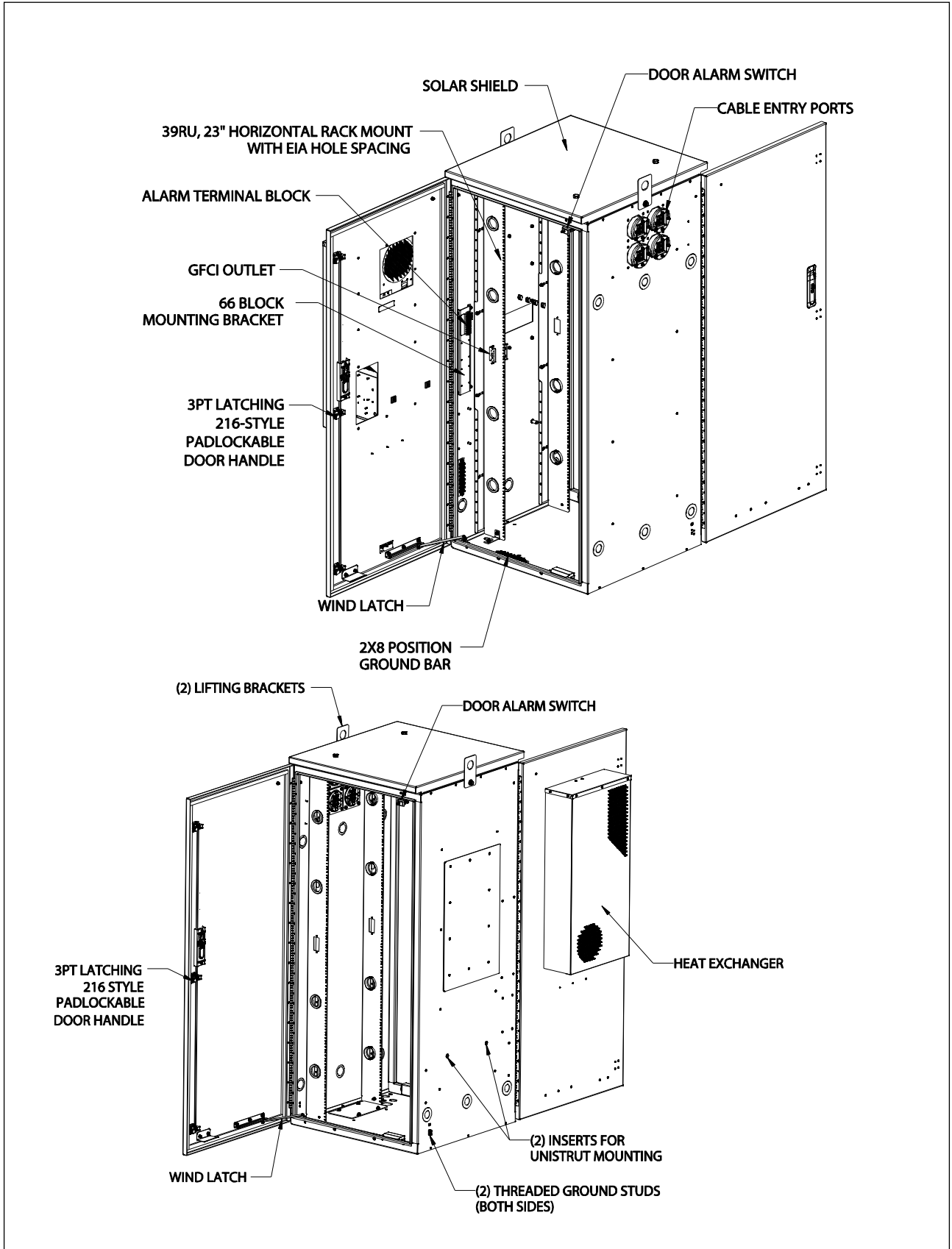


Figure 17 PM63912MC1 Components

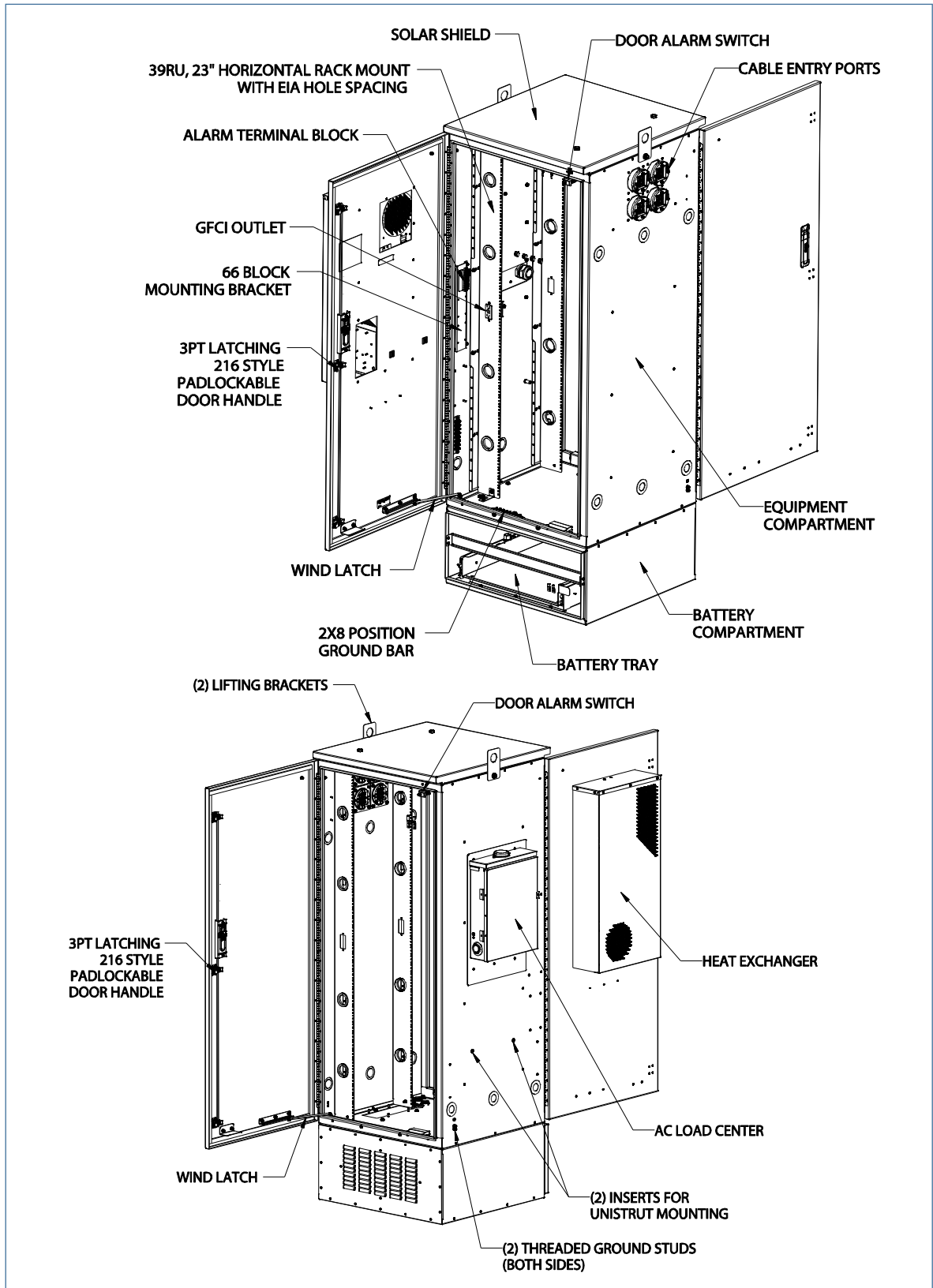


Figure 18 PM63922MC1 Components

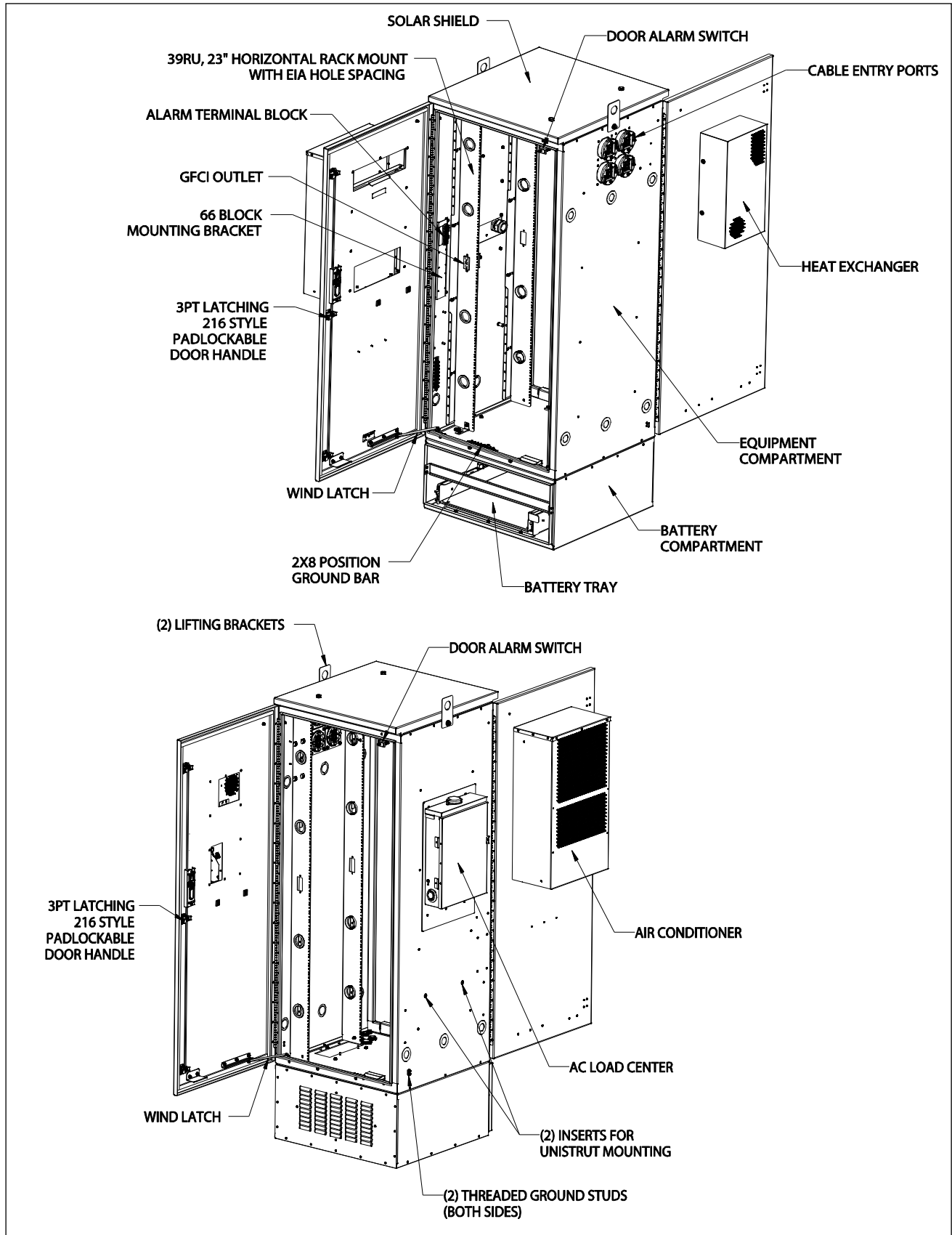


Figure 19 PM63922RF2 Components

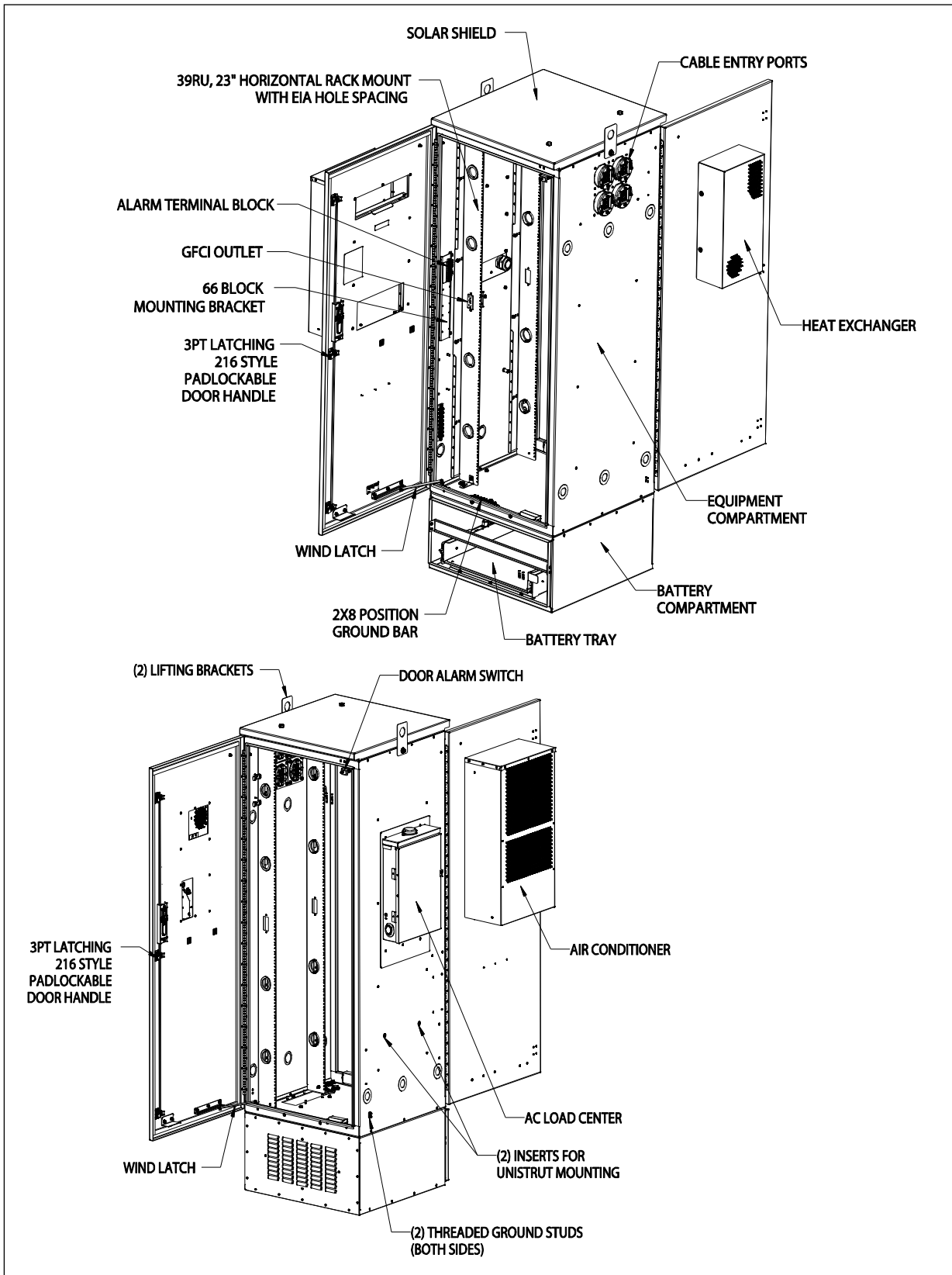


Figure 20 PM63922RF4 Components

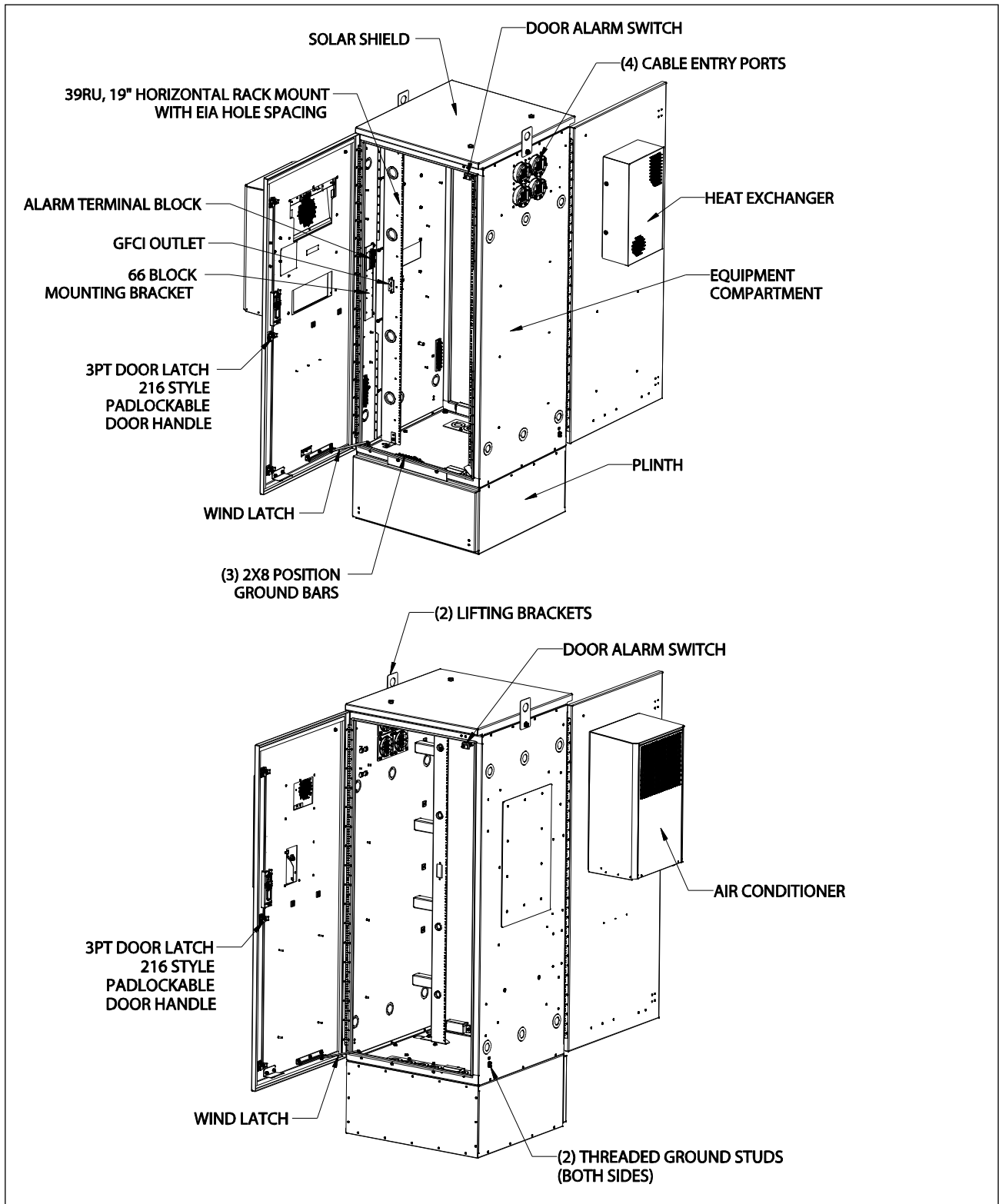


Figure 21 PM63922RN1 Components

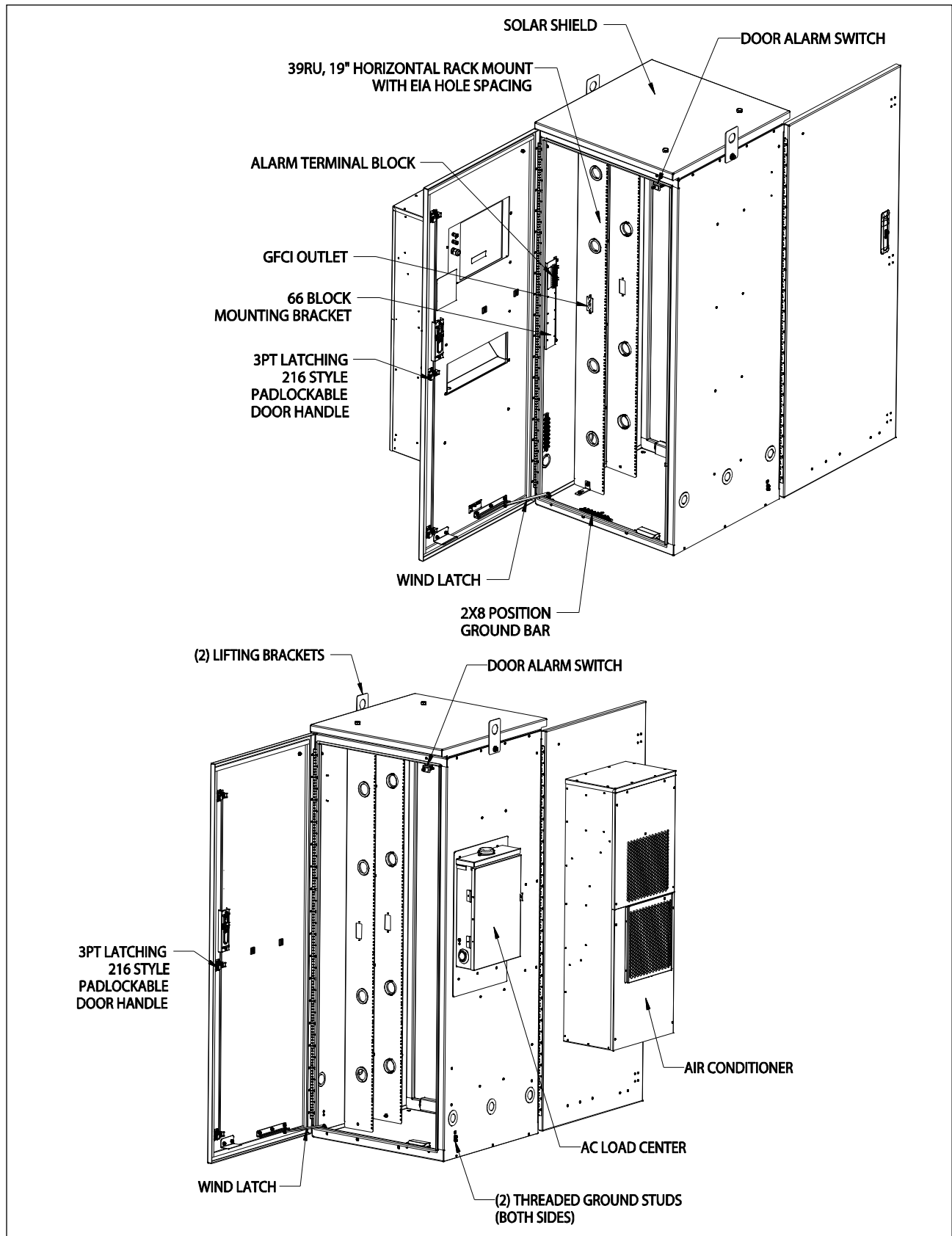


Figure 22 PM63912UC1 Components

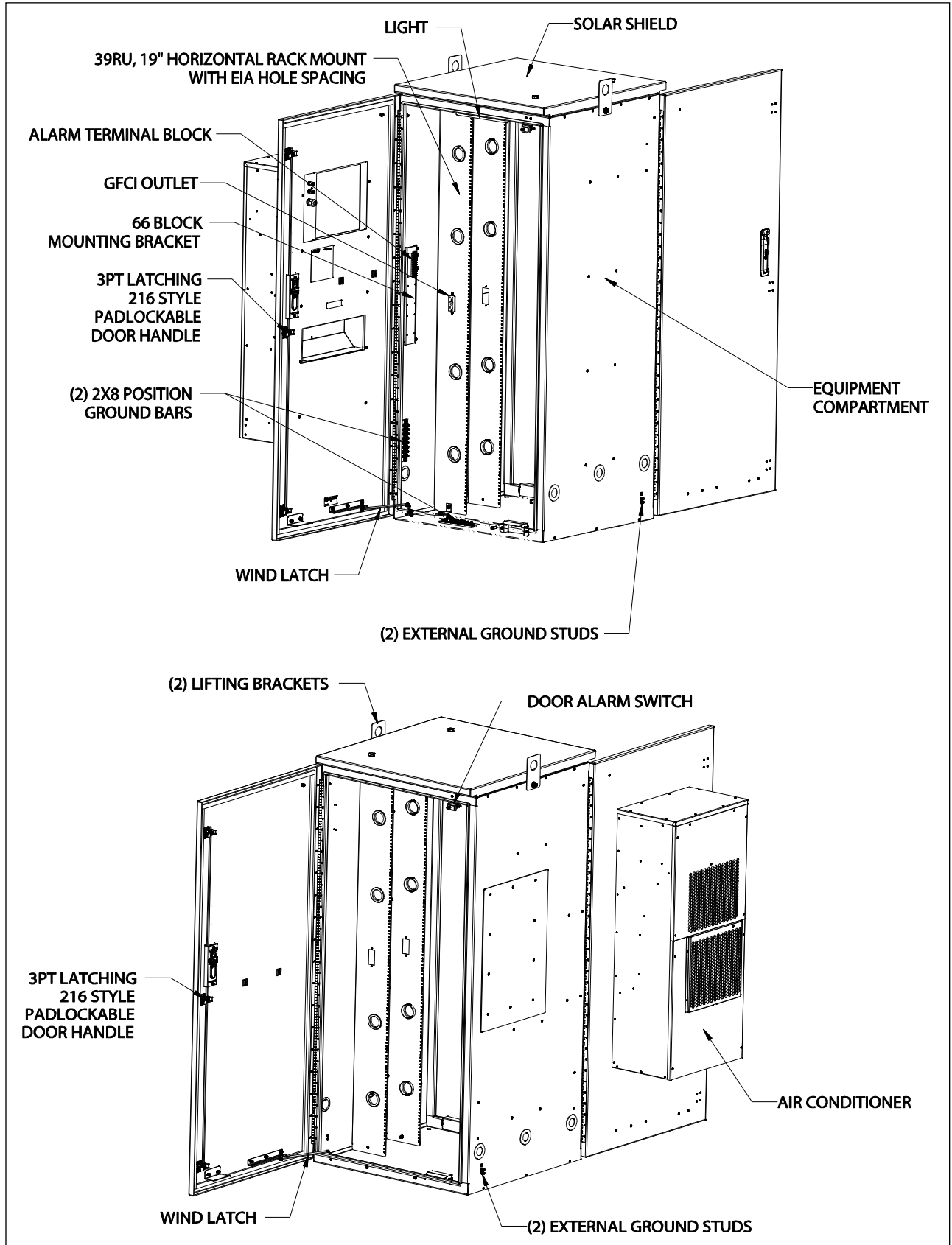


Figure 23 PM63912UN1 Components



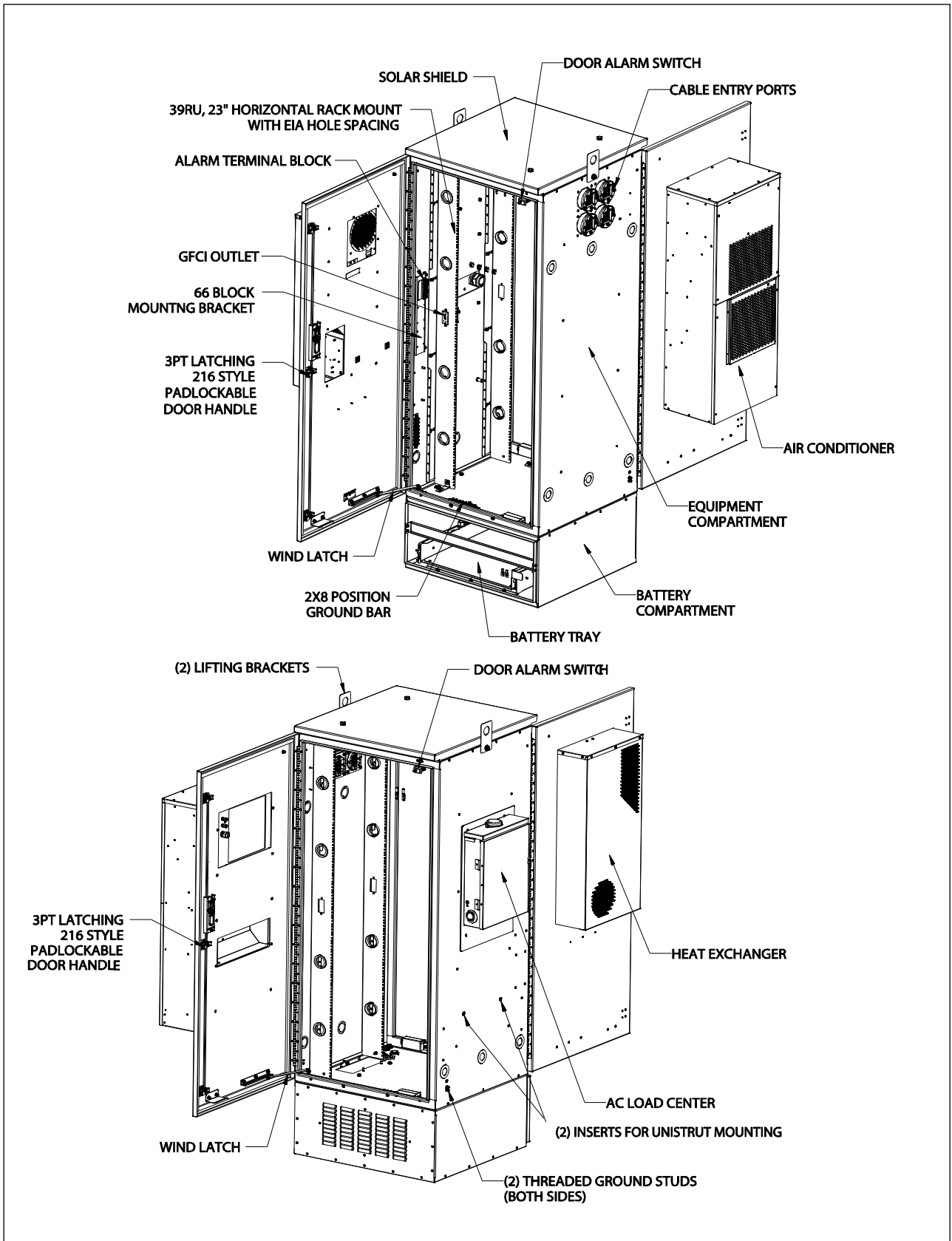


Figure 24 PM63922WC1 Components

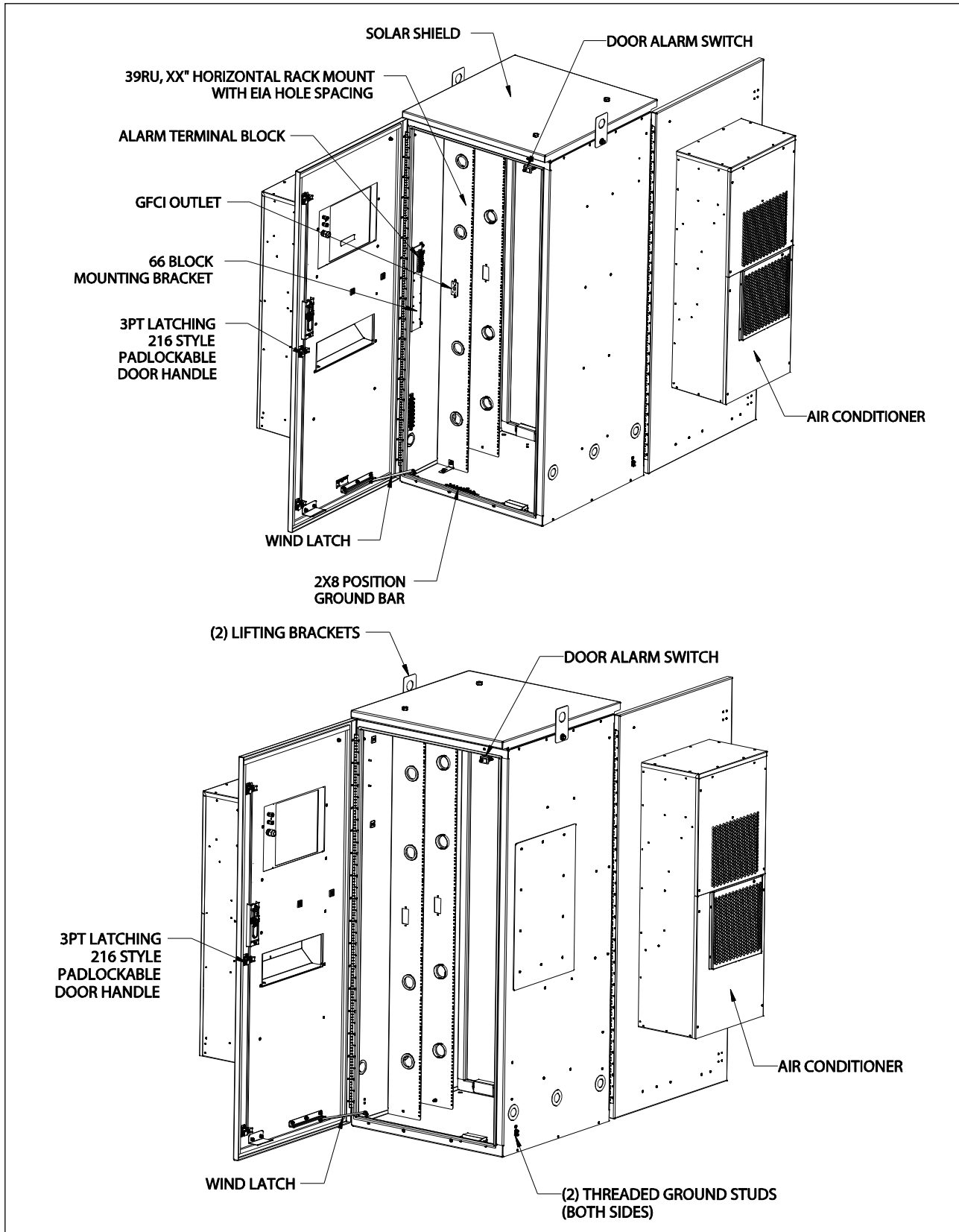


Figure 25 PM63912YN1 Components

Refer to Table 2 for specific information about the features of a PM639xxxxx base model. Also refer to this document for basic information about the PM639xxxxx and the supplemental practice also provided for information about additional equipment.

The following items are common to all units:

- Pad-lockable, 216-style door handle with 3-point latch system
- 2x8-position ground bar(s)
- Removable AC load center cover plate
- Solar shield
- Door wind latch(es)
- Intrusion alarm
- Alarm terminal block
- 19" or 23" 39RU of rack space
- 66-block mounting bracket
- One GFCI outlet

### 3. INSTALLATION

This section describes the procedures for installing the CUBE, which consist of:

- inspecting the equipment
- following all safety precautions
- determining the mounting location
- gathering the necessary tools and equipment
- preparing the installation site
- mounting/installing the enclosure
- grounding the enclosure
- making the necessary power connections
- installing batteries, if required
- making installer fiber and copper cable feed wiring connections inside the enclosure
- site cleanup

#### 3.1 Inspecting the Product

The CUBE is shipped mounted upright to a skid. Remove the bolts, unpack the unit, remove and dispose of the packaging material.

*-INSPECTION NOTE-*

*Visually inspect the unit for damages prior to installation. If the equipment was damaged in transit, immediately report the extent of the damage to the transportation company.*

#### 3.2 Following and Using Safety Precautions

Read the following site and safety tips, cautions and warnings, then proceed with the paragraphs that follow.

- For installation, follow all National Electrical Codes (NEC) ANSI/NFPA 70-2005, local, environmental, workplace, and company codes, safety procedures, and practices.
- Minimum spacing between the accessories and components and the housing for ITE equipment shall be maintained for safe operation of the equipment when installed in accordance with NEC ANSI/NFPA 70-2005

- Read all instructions, warnings and cautions on the equipment and in the documentation shipped with the product.
- Ground connections should always be connected first.
- Do not place this product on weak or unstable surfaces which may allow the product to fall, resulting in potentially serious damage(s) to persons or product.
- The CUBE should be installed by authorized trained personnel only.
- In windy conditions, be sure to engage the door latch(es) to secure the door in a stationary position.

#### 3.3 Obtaining Tools and Equipment

Obtain the following recommended or needed items for installing the CUBE on a pad or steel grate:

- Sufficient length and quantities of fiber cable (or pigtails)
- Cable scoring, opening, and cutting tools for cable sheathing, shields, wrappings, strength members and buffer tubes
- Wire strippers
- Crimpers
- Cable, tube, wire, and fiber cleaning materials
- Protective and/or insulated work gloves
- Safety glasses
- Tape measure
- Marking utensil
- #6 ground wire or rod and earth ground materials
- Bond strap (optional, from cable bond clamp to bond post)
- Any exterior cable strain relief, per company practice
- Slotted and Phillips screwdrivers
- Assorted cable ties, clips, or fasteners (optional)
- Can wrench (216 tool)
- Level
- Pad-mounting template
- Derrick (crane) for lifting

#### 3.4 Preparing the Installation Site

Observe the following site preparation recommendations:

- Adequate horizontal and vertical space should be left between multiple installations to allow for proper cable access, as well as enough room to open the doors.
- The site must meet minimal personnel and equipment safety requirements.
- The distance from the cable entry point should be consistent with local installation practices.
- The pad or steel grate must be able to support the weight of the CUBE.
- Run all fiber and copper facilities to the site.

### 3.5 Lifting the CUBE

#### 3.5.1 Required Equipment

Refer to Table 2 for the specific weight of an individual enclosure.

- One derrick (crane) capable of lifting the CUBE
- Two, 8-ft. long (minimum) wire rope slings with each having a 2,500 lbs. capacity
- Two connecting links to attach slings to the CUBE's lifting brackets
- 75-ft. long tagline rope

Insert the lifting cable sling connecting links securely through each of the lifting brackets as shown in Figure 26.

#### 3.5.2 Warnings and Specific Safety Precautions



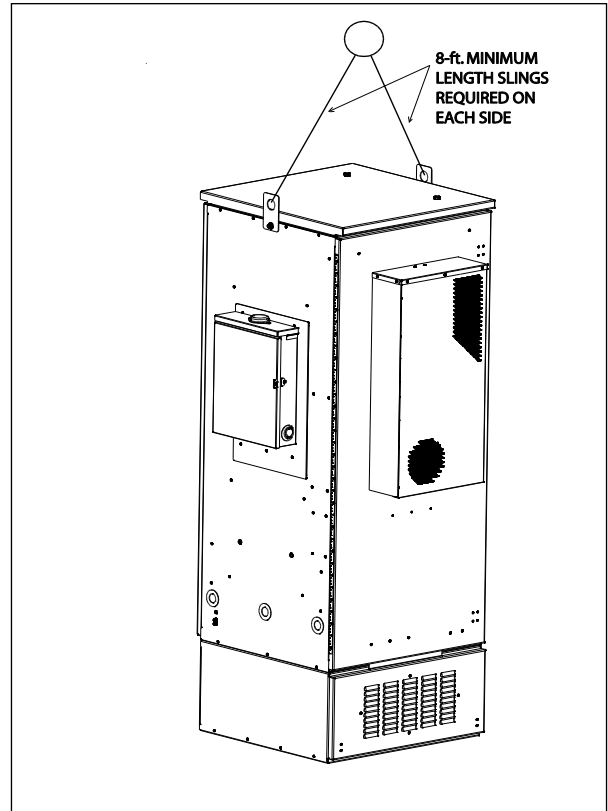
**Improper hoisting equipment and unsafe lifting procedures can result in serious injury or death.**

Observe the following local safety procedures when performing the tasks in this section:

- Keep the CUBE away from any power lines.
- Keep bystanders away from the work operations at all times. Only trained operators shall operate the crane for lifting and setting the CUBE.
- Keep the CUBE away from any power lines.
- Keep bystanders away from work operations at all times.
- Only trained operators shall operate the derrick (crane) for lifting and setting the CUBE.
- Operators should not suspend loads over people or equipment.
- All persons working with hoisting equipment shall wear standard safety gear according to local practices including safety helmets and steel-toed shoes.
- Do not operate the hoisting equipment until all stabilizer are extended and in firm contact with the ground or adequate support structure.
- Do not operate the crane until all stabilizers are extended and in firm contact with the ground or adequate support structure.
- Do not attempt to retract or extend the stabilizers while a load is suspended.

#### 3.6 Mounting the CUBE on a Concrete Pad

The CUBE can be mounted on a new or existing precast concrete pad directly or with optional plinth kit #97-002162-A. Optional mounting template #97-002206-A can be ordered for pad alignment. A loose gasket is provided inside the enclosure for placing the CUBE on a pad. Should the gasket become damaged during installation, a replacement can be ordered under part number 39-00350-0. Refer to Figure 27 for installing the optional plinth kit, template and gasket.



**Figure 26 Lifting a CUBE**

The following steps are used for mounting the CUBE on a pad:

1. Clean any debris from the concrete pad.
2. Install the gasket and place into position on the pad so that the gasket will be underneath the bottom of the CUBE when it is placed. Line up the gasket so that the cutouts are in position around the conduit opening and over the mounting bolts as shown in Figure 27.
3. For cabinets in which the cable conduit is entering from the bottom of the enclosure, dress the cable conduit so that it aligns with the opening in the base as it is lowered onto the pad.
4. Open the front door of the enclosure.
5. If the enclosure is equipped with a battery compartment, remove the bolts from the battery compartment and set aside for later replacement.
6. The CUBE must be parallel to the pad surface as it is placed onto the pad. Make sure the CUBE lines up with the mounting bolts in the pad.
7. Place the CUBE on the pad. Loosen the slings so that all the weight is on the pad. Check that the CUBE is properly aligned.
8. To secure the CUBE to the pad, install  $\frac{1}{2}$ "-13 bolts with washers and lock washers into the bottom flange. Tighten all bolts securely.
9. Once the CUBE is secured, remove the slings and tagline.

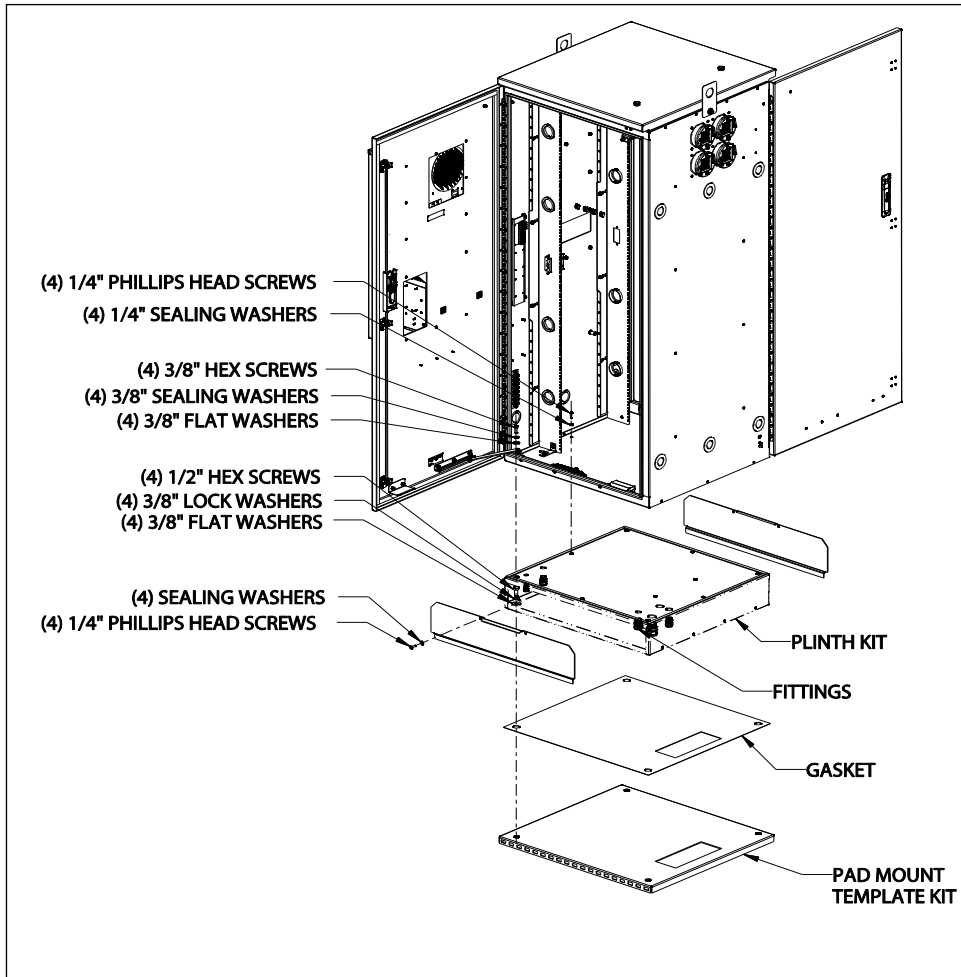


Figure 27 Optional Plinth Kit Installed Under Enclosure

**CAUTION-**

Because of the added risk of injury or damage, enclosures should not be lifted with batteries installed.

**3.7 CUBE Wiring and Equipment**

After the CUBE is properly mounted in the desired location, install ground and power connections. Always ground the equipment first, before making any other connections. Refer to the corresponding electrical schematics (Figures 28 through 41) for the base models covered in this document.

In order to prevent condensation prior to being placed in service, do not remove the desiccant until turn-up.

⚠ -WARNING- ⚠

Perform all bonding and grounding connections prior to any electrical and communications connections.

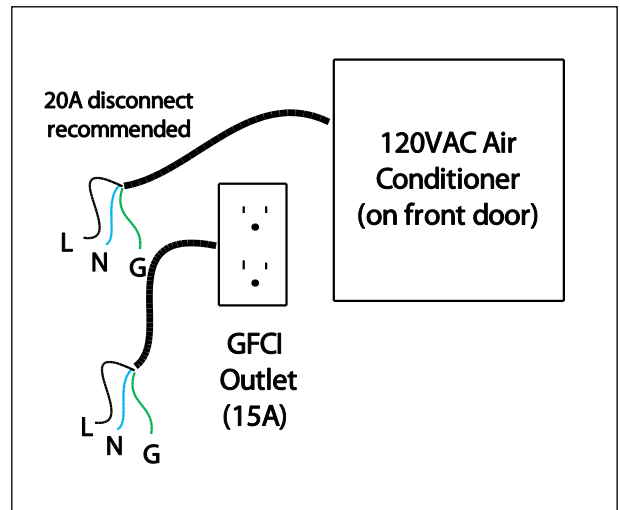


Figure 28 Electrical Diagram for PM63912JN1

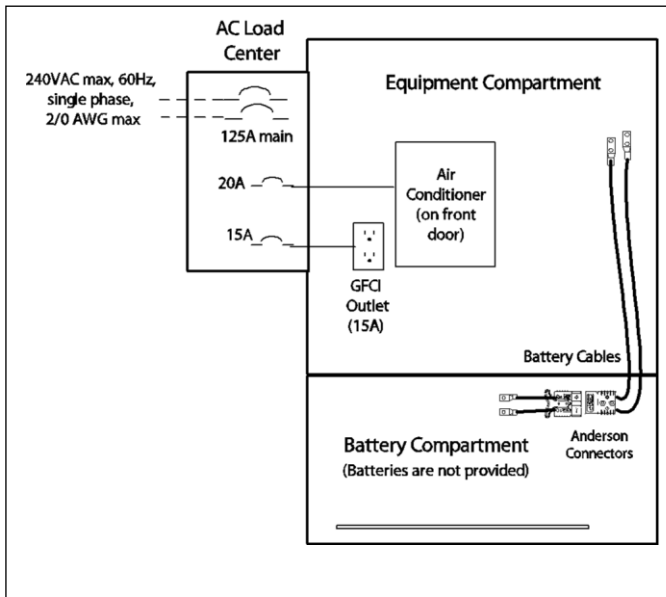


Figure 29 Electrical Diagram for PM63921JF1

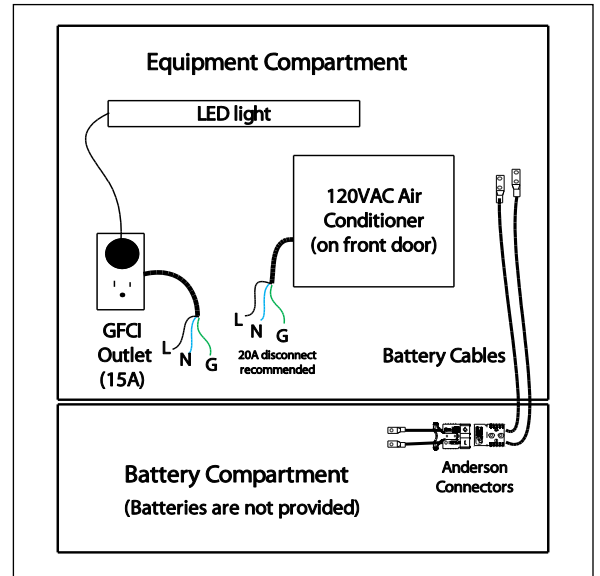


Figure 30 Electrical Diagram for PM63922JN1

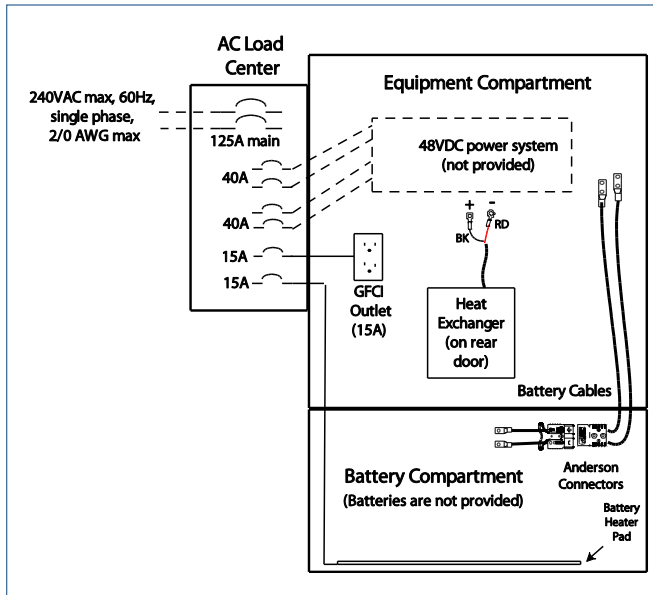


Figure 31 Electrical Diagram for PM63922IC1

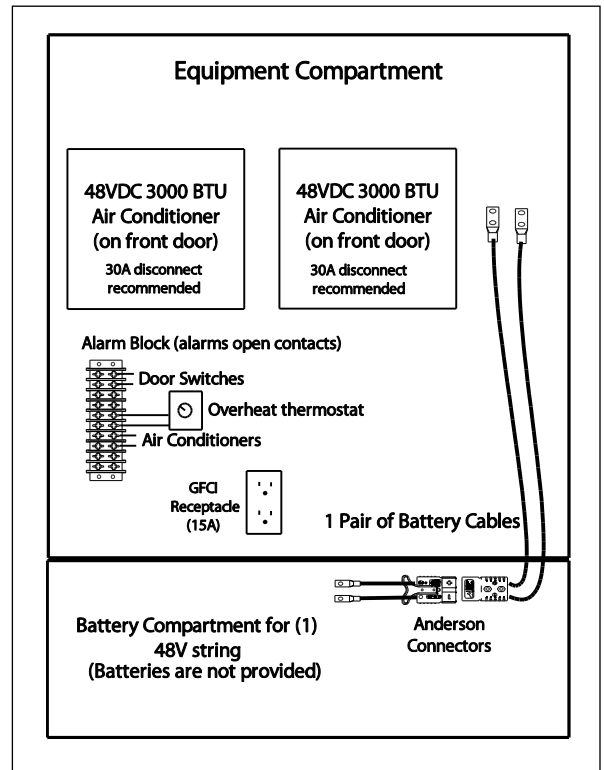


Figure 32 Electrical Diagram for PM63922LN1

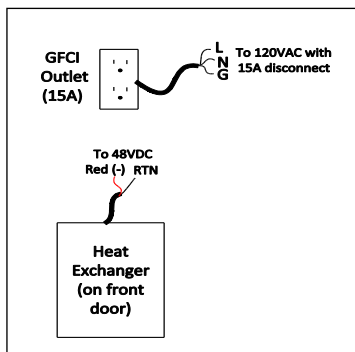


Figure 33 Electrical Diagram for PM63912MC1

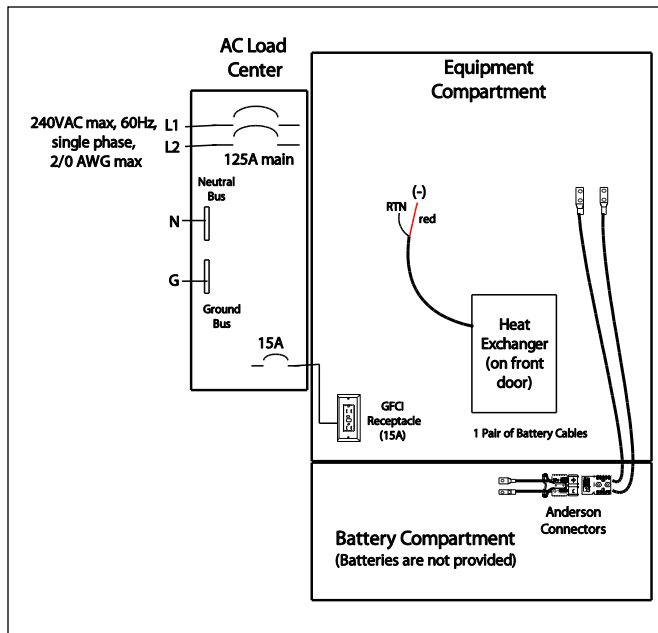


Figure 34 Electrical Diagram for PM63922MC1

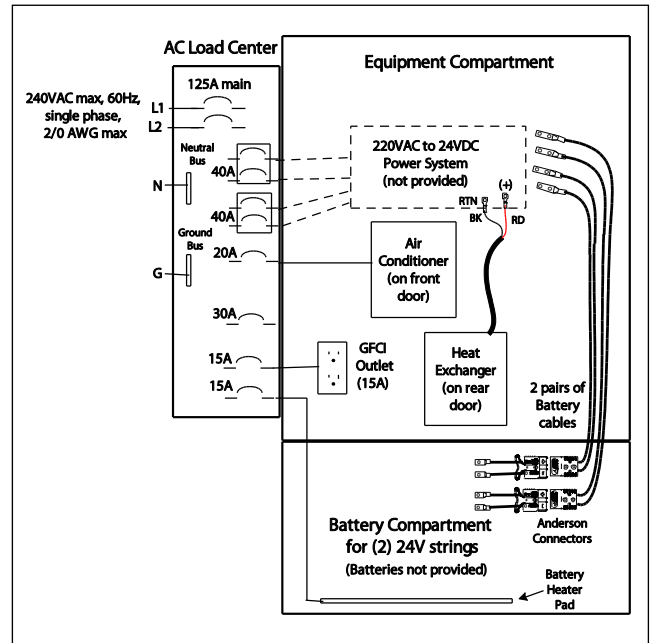


Figure 35 Electrical Diagram for PM63922RF2

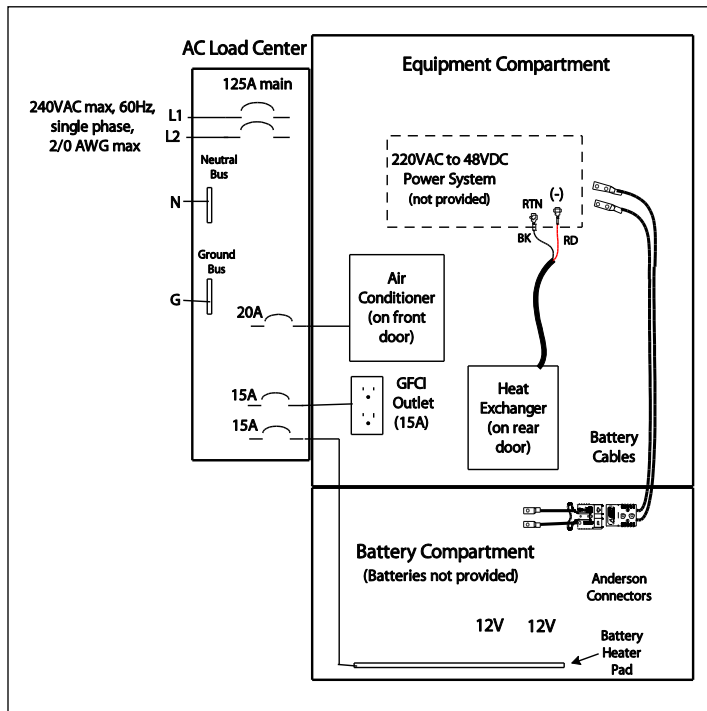


Figure 36 Electrical Diagram for PM63922RF4

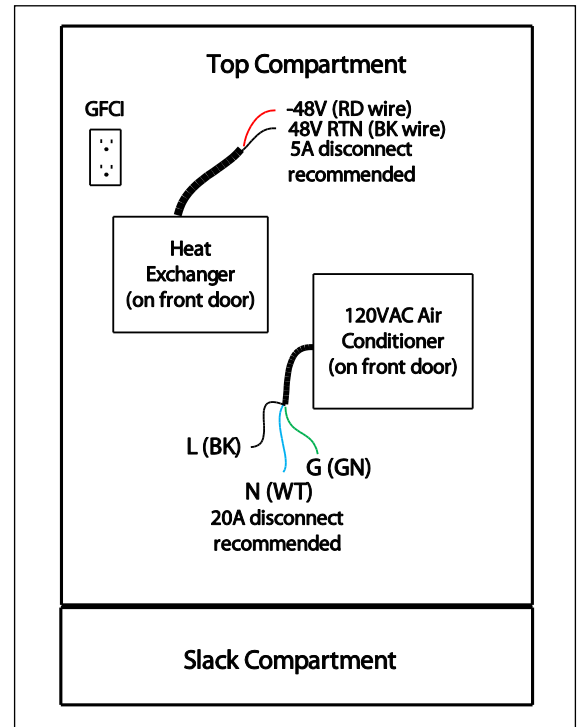


Figure 37 Electrical Diagram for PM63922RN1

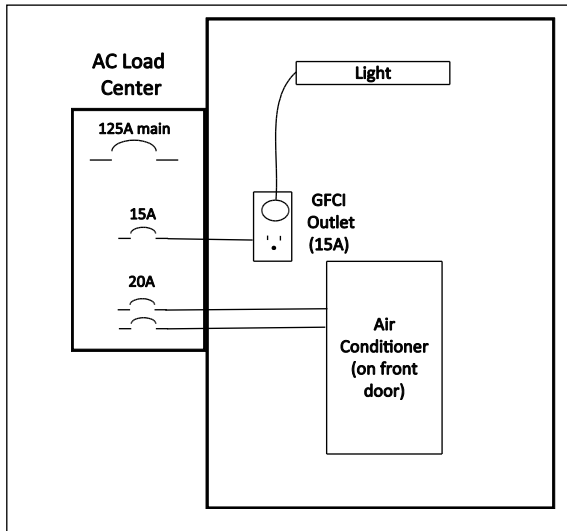


Figure 38 Electrical Diagram for PM63912UC1

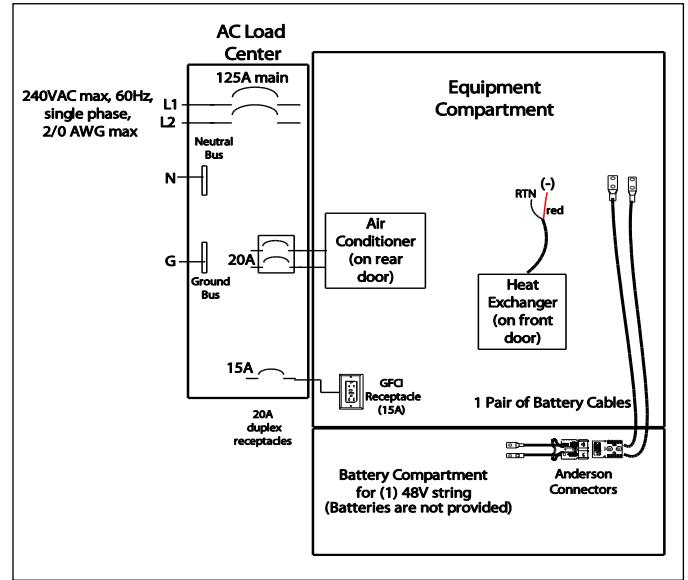


Figure 39 Electrical Diagram for PM63922WC1

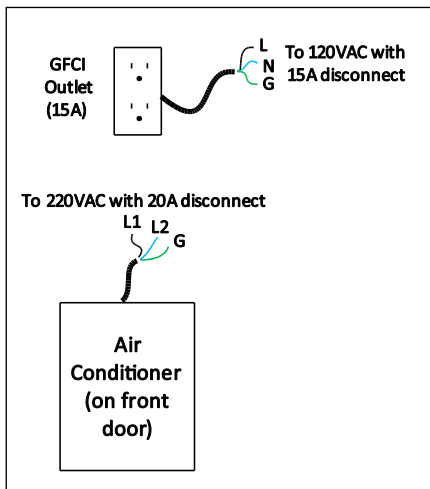


Figure 40 Electrical Diagram for PM63912UN1

### 3.7.1 Ground Connections

There are two or four 2x8-position ground bars provided inside for ground of all internal equipment.

The outside has two external ground studs for terminating a double-hole lug for earth ground or site ground wire.

### 3.7.2 AC Voltage Connections on CUBEs with Load Centers

On some versions, there are two rivnut inserts below the AC load center. These rivnuts can be used for mounting a piece of unistrut (not provided), which would provide a tie-down for the incoming conduit.

For units that ship with an attached AC load center, the incoming AC voltage is a single phase 208/240V at 60 Hz and is connected to the AC load center. The maximum wire size is 2/0 AWG for the 125A main circuit breaker. The installer connects the two hot (line)

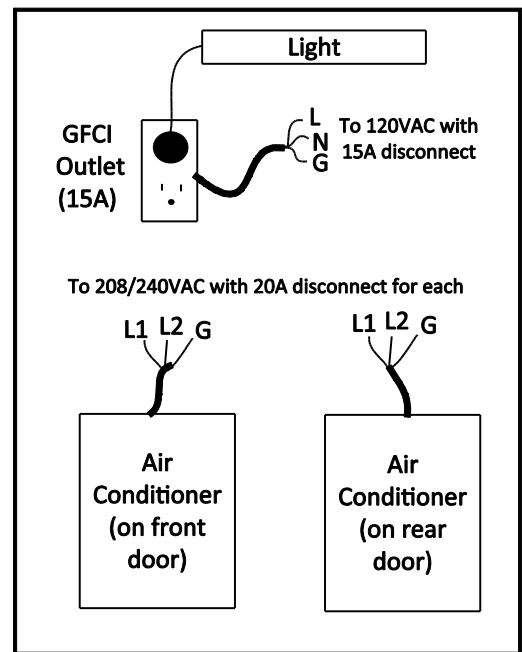
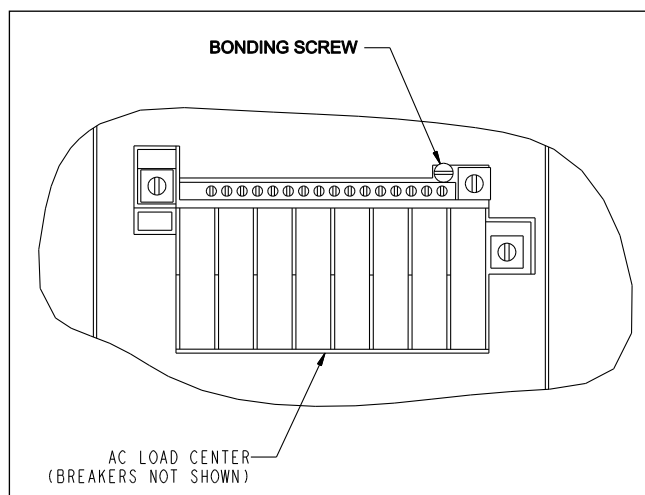


Figure 41 Electrical Diagram for PM63912YN1

wires to the breaker, the neutral wire to the neutral bus and the ground wire to the ground bus. Wire should be sized per National Electrical Code NFPA70 table 310.16. Load center configurations for the base models are shown in the block diagrams in this practice. Load center configurations for the individual models are provided in the supplemental practice for that model. A 15A breaker is always used for the GFCI outlet/battery heater pad (if provided). Units that have light fixtures on top will be plugged into the GFCI outlet.

The AC load center is configured as a sub panel with the separate neutral and ground busses. If the load center needs to be configured as a main panel, the green bonding screw inside the load center must be screwed down to connect the busses. See location of bonding screw in Figure 42.





**Figure 42 Example of AC Load Center Bonding Screw**

On units that have no load center, the 15A GFCI outlet must be connected to a 120VAC power source with a 15A disconnect.

### 3.7.3 AC Load Center Cover Plate

All CUBE's are shipped with a blank AC load center cover plate on one side of the enclosure. The blank cover plate allows the AC load center to be mounted on either side of the enclosure, with the blank cover plate used to cover the opening in the side without the AC load center.

### 3.7.4 Alarm Block Connections

There is a 10-position, labeled alarm block in the equipment compartment that can be used for monitoring the following items (Refer to Figure 43):

The two wires on the door switches are connected to the top two positions (first and second) on the alarm block. These wires provide a normally closed connection when the doors are closed and an open connection if any door is open.

The third and fourth positions are used for monitoring CUBE's that have heat exchangers. These positions provide a normally closed connection when the heat exchanger is running normally and open upon a failure or if the unit is off turned off.

The seventh and eighth positions are used for monitoring CUBE's that have air conditioners. These positions provide a normally closed connection when the air conditioner is running normally and open upon a failure or if the unit is off turned off. Refer to the air conditioner manual supplied with the CUBE for conditions that will cause an alarm

### 3.7.5 Battery Connections and Heater Pad

The CUBE-PM63921JF1, CUBE-PM63922JN1, CUBE-PM63922IC1, CUBE-PM63922LN1, CUBE-PM63922MC1, CUBE-PM63922RF2 and CUBE-PM63922RF4, and CUBE-PM63922WC1 are equipped with a battery compartment that has a slide-out battery tray with straps. The battery tray can accommodate one string of -48V or two strings of 24V batteries. A 100W battery heater pad is installed on battery trays intended for use with lead acid batteries, which is controlled via a thermostat that turns on at 4°C (40F) and turns off at 15°C (60F). There are separate breakers for the heater pad. The power is connected to the GFCI outlet. A 3A fuse or breaker is recommended.



**Figure 43 Alarm Block Diagram**

To install batteries, open the equipment chamber door and remove the two screws at the top of the battery compartment cover, then remove the four screws on the bracket in front of the battery tray. To unlock the battery tray, press down on the left side lever and slide the battery tray forward. Remove the battery strap and carefully install one (-48VDC) or two (+24VDC) battery strings on to the battery tray.

For -48VDC power shelves, the battery compartment has an Anderson battery connector that is connected to the power shelf. A mating Anderson battery connector with battery cables and lugs is shipped loose with the CUBE. For +24VDC power shelves, the battery compartment has two pair of Anderson battery connectors that are connected to the power shelf. A pair of mating Anderson connectors with battery cables and lugs is shipped loose with the CUBE.

After the lugs are properly connected to the batteries, the Anderson connectors are inserted into each other, allowing a safe connect/disconnect for the batteries.

Secure the batteries with the battery strap. Slide the battery tray back into the locked position and replace the battery bracket using the four screws. Fasten the door back on using the two screws.

The battery temperature sensor needs to be connected to the closest battery. The other end of the sensor is connected to the power supply's controller unit. This option needs to be enabled through the controller unit (refer to controller documentation).

*-NOTE-*

*If replacing batteries, make sure that the battery probe is disconnected prior to sliding the battery tray forward.*

### 3.7.6 Fiber and Copper Entry

Fiber and copper typically come in through three 1.75"/2.5" knockouts in the upper right side of the enclosure and three 1.7"/2.5" knockouts on the lower left and right sides (6), for a total of nine knockouts. The exceptions are the PM63921JF1, PM63912UC1 and PM63912YN1, each of which has three 1.75"/2.5" knockouts on the lower left and right sides (6) only.

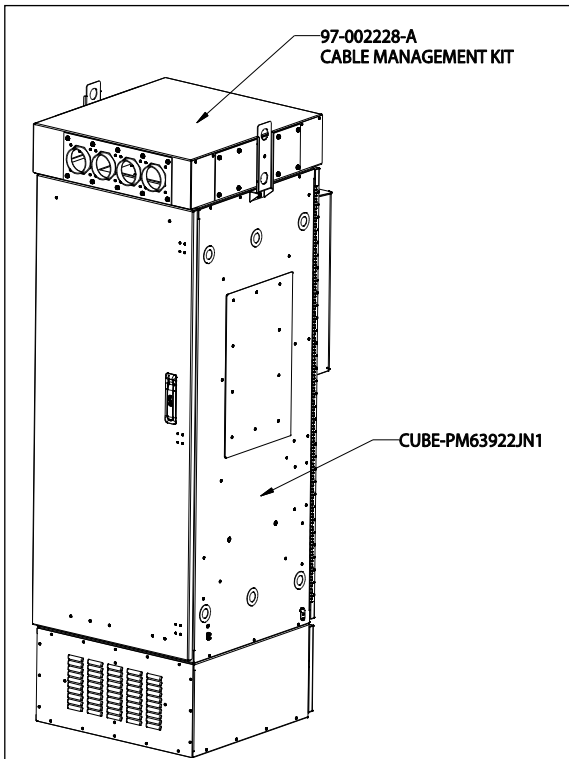
A rectangle cover plate over the bottom rectangles must be removed in order to route the cables, with the exception of the PM63922RN1, which has a cable entry panel with six ports. The PM63922RN1 also has offset rails to facilitate cable access.

### 3.7.7 Plinth-type Base (PM63922RN1)

The PM63922RN1 has a plinth-type base or slack compartment that has no battery facilities. The plate between the equipment compartment and the plinth base is equipped with a six-port cable entry panel (refer to Figure 21 and Figure 37).

### 3.7.8 Optional Cable Management Kit

Charles Kit #97-002228-A cable management kit is available as an option that allows cable to enter through the top of the enclosure (refer to Figure 44).



**Figure 44** PM63922JN1 with Kit #97-002228-A Installed

### 3.7.9 Thermal Equipment

CUBE models can be equipped with a heat exchanger, an air conditioner, or both a heat exchanger and an air conditioner. Refer to Table 2 for information about a specific base model.

### 3.7.10 Heat Exchanger

The 750W, 1200W and 1880W heat exchangers are all equipped with on-board speed controllers. The 750W and 1200W units are intended to be connected to a 5A fuse or circuit breaker, while the 1880W unit would need a 10A.

On +24VDC systems, the red wire is connected to the (+) output of the fuse or breaker while the black wire is connected to the return.

On -48VDC systems, the red wire is connected to the (-) output of the fuse or breaker while the black wire is connected to the return.

There are two alarm leads that are normally open and will close upon a heat exchanger failure. These are connected to the alarm terminal block.

For more information, refer to the heat exchanger documentation found inside the CUBE.

### 3.7.11 Air Conditioner and Heater

The 4000BTU air conditioner is equipped with a 1200W heater and runs off 120VAC. On units that have AC load centers, the 4000BTU air conditioner is connected to a single-pole 20A circuit breaker. On units without a load center, the air conditioner must be connected to a 120VAC power source with a 20A disconnect.

The 10000BTU air conditioner is equipped with a 2000W heater and runs off 220VAC. On units that have AC load centers, the 10000BTU air conditioner is connected to a two-pole 20A circuit breaker. On units without a load center, the air conditioner must be connected to a 208/240VAC power source with a 20A disconnect.

The factory default cooling cycle is set at 30°C and can be changed through the controller, which is accessed by removing the eight T25 security torx screws on the top front panel of the unit. The heating cycle is factory set at 5°C.

For further information, refer to the air conditioner documentation that ships with the CUBE

### 3.7.12 DC Air Conditioner

The PM63922LN1 is equipped with two Vikinor Pte. Ltd. VAK-3000-SLIM-D3 10000BTU DC air conditioners. A 20A breaker is provided in the power system for the DC air conditioner.

## 3.8 Adjustable Rack Rails

The vertical rack rails have an adjustable depth. By loosening the four 1/4" keps nuts on the four horizontal cutouts in each rail, the rails can be repositioned to different set points on the front and the rear. Retighten to 60 in-lbs.

## 3.9 Optional Folding Laptop Tray

Some of the enclosures have mounting studs on the front door for installing an optional folding laptop tray. This tray is shown in the dimensional figures and can be ordered under Charles #97-002178-0, which includes hardware for mounting. To open the tray, lift the platform and lower the hinged vertical support bracket.

## 3.10 Verifying the Installation

Verify that earth ground and all grounding and bonding is complete and functional. After verifying that all installer connections are secure and complete, turn on the circuit breakers and verify that equipment turns up correctly.

## 4. PERIODIC MAINTENANCE

In the event that the enclosure needs to be opened in freezing conditions, a narrow, blunt metallic object such as a screwdriver or chisel, along with a non-metallic device such as a rubber mallet, may be used to remove excessive ice buildup around the door and

locking mechanism. A commercial aerosol de-icer spray can be used to free up locks and latches if needed.

Periodic cleaning of the filter screens in the louvered battery compartment is important to maintain proper ventilation. To clean the filter screens, remove the four nuts on each screen and take out the screens. Use a soft brush or hose to remove any debris from the screen. Once clean, replace the screens using the four nuts removed previously. If a replacement filter is needed, order Charles Part No. 39-000260-0.

Refer to the air conditioner manual supplied with the air conditioner for periodic maintenance requirements.

Heat exchangers require no scheduled maintenance other than cleaning the fans and heat exchanger core if they become contaminated with dust or residue. The cover is taken off by removing the four T15 screws on the outside.

The GFCI duplex receptacle should be reset periodically to ensure it is working.

## 5. TECHNICAL ASSISTANCE AND REPAIR SERVICE

For questions on product repair or if technical assistance is required, contact Charles Technical Support at:

847-806-8500

800-607-8500

847-806-8556 (FAX)

[techserv@charlesindustries.com](mailto:techserv@charlesindustries.com) (email)

[http://www.charlesindustries.com/main/tech\\_support.htm](http://www.charlesindustries.com/main/tech_support.htm)

## 6. WARRANTY & CUSTOMER SERVICE

Charles Industries, Ltd. offers a one-year warranty on the CUBE product. The Charles warranty is limited to the operation of the CUBE hardware as described in this documentation and does not cover equipment which may be integrated by a third party. The terms and conditions applicable to any specific sale of product shall be defined in the resulting sales contract. For questions on warranty or other customer service assistance, contact your Charles Customer Service Representative at:

847-806-6300

847-806-6653 (FAX)

[mktserv@charlesindustries.com](mailto:mktserv@charlesindustries.com) (email)

[http://www.charlesindustries.com/main/telecom\\_sales\\_support.htm](http://www.charlesindustries.com/main/telecom_sales_support.htm)

## 7. SPECIFICATIONS

### 7.1 Regulatory Specifications

- Designed to be compliant to GR-487
- Designed to be compliant to UL-60950

### 7.2 Physical Specifications

The physical specifications are shown in Table 1 and Table 2.

Category	
Color	Off-White
Material	.125" Welded Aluminum
Alarm Block	10-position
Equipment EIA Rack Space	39 RU of front and rear 19" or 23" rack spacing with tapped 12-24 mounting holes
Cable Entrance	Refer to the appropriate dimensional and component drawings
Heat Exchangers	
750Watt	Dantherm #PS023022Y Dantherm #PS023022Z
1200Watt	Dantherm #PS035035Z-S
1880Watt	Dantherm #PS035055Z-S
Air Conditioners	
4000BTU	Dantherm #CS030040A
10000BTU	Dantherm #IA/C T-B10000
DC Air Conditioner	Vikiner Pte. Ltd.# VAK-3000-SLIM-D3
Optional Mounting Kits	Plinth Kit (optional): 97-002162-A Pad-Mount Template: 97-002206-A
23" Rail Conversion Kit	Kit #97-002223-A
Cable Management Kit	Kit #97-002228-A
Folding Tray (optional)	#97-002178-0
Replacement Gasket	39-000350-0
Operating Temp. Range, Inside Enclosure	-40° to +149°F, -40° to 65°C
Operating Temp. Range, Outside Enclosure	-40° to +115°F, -40° to 46°C
Humidity	0 to 95% (non-condensing)
Altitude	Up to 2,000 meters (6560')

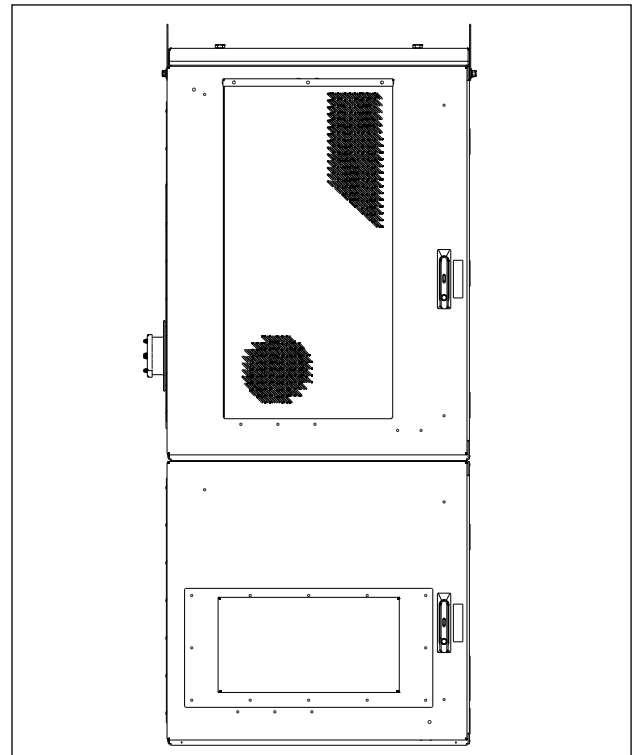
**Table 1 CUBE-PM639xxxxx Physical Specification**

CUBE Part Number	Size	Weight (as shipped)	Rack Spacing	Max. Heat Dissipation	Battery Compartment	Thermal
CUBE-PM63912JN1 (no AC load center)	74"Hx32"Wx32"D	313	23"	1200W	No battery compartment	4000 BTU AC
CUBE-PM63921JF1	89"Hx32"Wx32"D	480	23"	1200W	1	4000 BTU AC
CUBE-PM63922JN1	89"Hx32"Wx32"D	429	23"	1200W	1	4000 BTU AC
CUBE-PM63922IC1.	89"Hx32"Wx32"D	550 lbs.	23"	1200W	1	1200W HX
CUBE-PM63922LN1	89"Hx32"Wx32"D	565 lbs.	19"	5800 with AC	1	10000BTU AC (2) Vikinor PTE Ltd. DC air conditioners
CUBE-PM63912MC1.	89"Hx32"Wx32"D	340 lbs.	23"	1880W	1 (no heater pad)	1880W HX
CUBE-PM63922MC1	89"Hx32"Wx32"D	500-550 lbs.	23"	1880W	1	1880W HX
CUBE-PM63922RF2	89"Hx32"Wx32"D	500-550 lbs.	23"	1200W with AC 750W with heat exchanger	1	750W HX 4000BTU AC
CUBE-PM63922RF4	89"Hx32"Wx32"D	500-550 lbs.	23"	1200W with AC 750W with heat exchanger	1	750W HX 4000BTU AC
CUBE-PM63922RN1	89"Hx32"Wx32"D	363 lbs.	19"	1200W with AC 750W with heat exchanger	Plinth compartment (no battery compartment)	750W HX 4000BTU AC
CUBE-PM63912UC1	74"Hx32"Wx32"D	450 lbs.	19"	2900W with AC	No battery compartment	10000BTU AC
CUBE-PM63912UN1 (no AC load center)	74"Hx32"Wx32"D	435 lbs.	19"	2900W with AC	No battery compartment	10000BTU AC
CUBE-PM63922WC1	74"Hx32"Wx32"D	600 lbs.	23"	2900W with AC 1880W HX	1	10000BTU AC 1880W HX
CUBE-PM63912YN1	74"Hx32"Wx32"D	625 lbs.	19"	5800W with AC	No battery compartment	(2) 10000BTU AC

**Table 2 CUBE PM639xxxxx Physical Specifications**

# Charles Universal Broadband Enclosure (CUBE) SS4B223MN2 General Description and Installation

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3.2 AC Voltage Connections .....	3
3.3 GE Infinity S Power System.....	3
3.4 Heat Exchanger.....	4
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4. TECHNICAL ASSISTANCE AND REPAIR SERVICE.....	4
5. WARRANTY & CUSTOMER SERVICE.....	4
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**Figure 1 Front View of the CUBE**

## 1. GENERAL INTRODUCTION

### 1.1 Document Purpose

This document provides general information for the Charles Industries Universal Broadband Enclosure CUBE-SS4B223MN2 that is not covered in the site support family document LT-SS24SS48. A front view of the CUBE is shown in Figure 1.

-NOTE-

*Hereafter, the cabinet will be referred to as SS4B223MN2 or the "CUBE."*

## 2. PRODUCT DESCRIPTION

This section contains information regarding the CUBE's physical design and interior components. The CUBE is 74" high and has an equipment compartment and a battery compartment that has two battery trays. Additional equipment in this CUBE is the 48V power system. Figure 2 shows the main components of the CUBE.

## 3. CUBE WIRING AND EQUIPMENT

After the CUBE is properly mounted in the desired location, install power, ground and battery connections. Refer to Figure 3 for a block diagram of the internal wiring.

-WARNING-

**Perform all bonding and grounding connections prior to any electrical and communications connections.**

### 3.1 Ground Connections

There are two 2x8 position ground bars provided in the equipment compartment for grounding all internal equipment. There are two threaded studs available: on the rear toward the bottom of the cabinet for connecting double-lug ground wires.

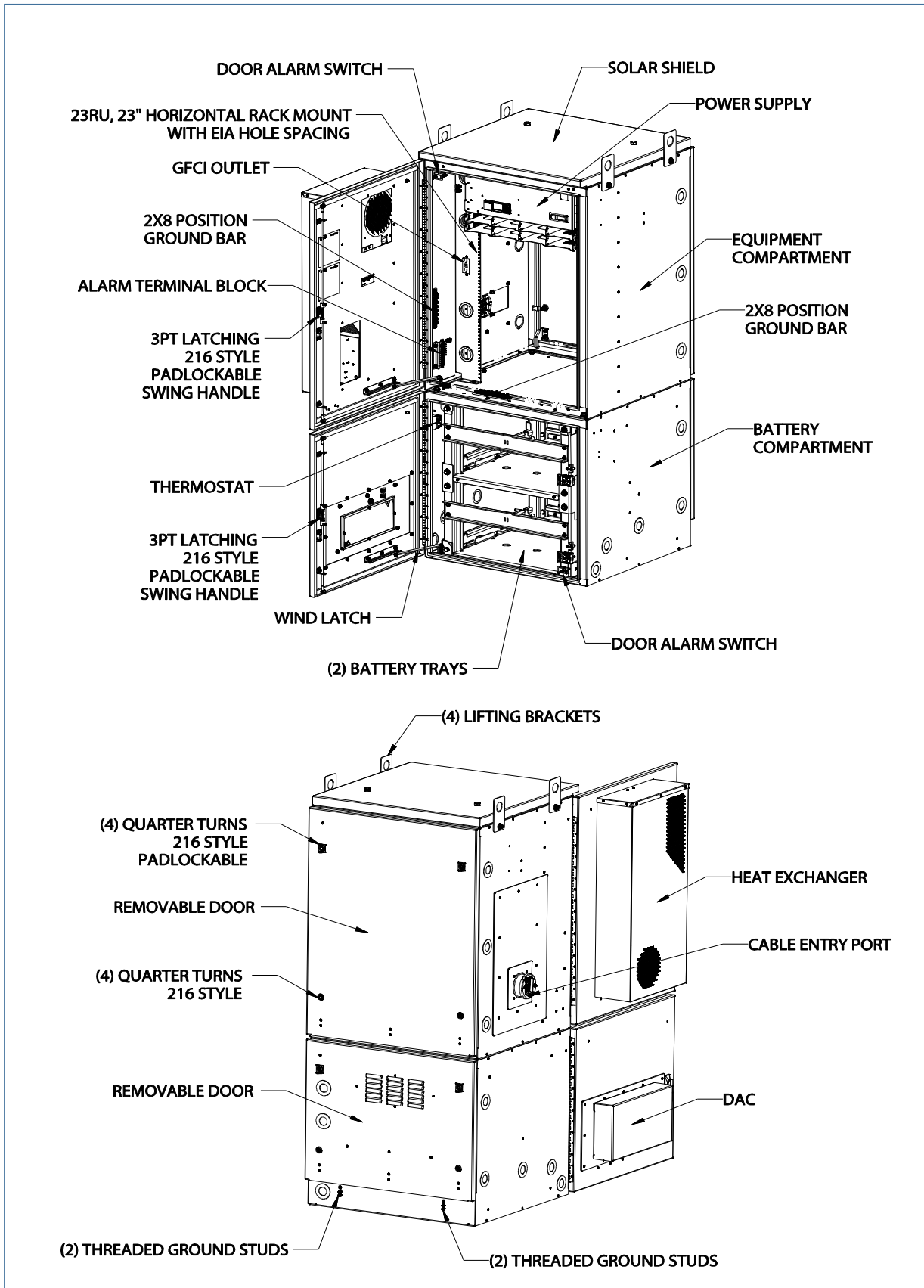


Figure 2 CUBE-SS4B223MN2 Components

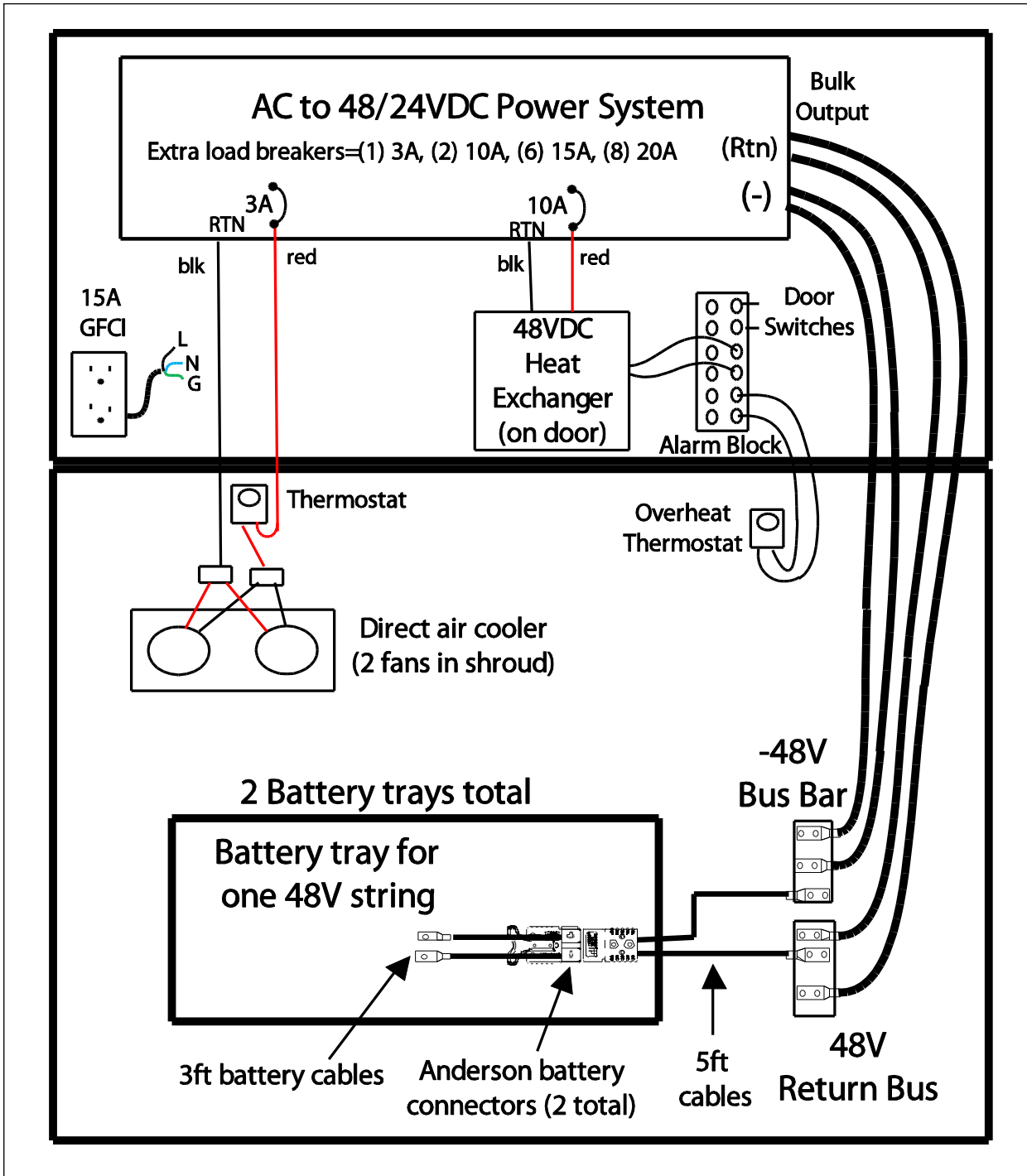


Figure 3 CUBE-SS4B223MN2 Electrical Diagram

### 3.2 AC Voltage Connections

The installer provides the AC voltage connections per company practices and in accordance with all local codes. Connect the GFCI receptacle to 120VAC 15A disconnect.

### 3.3 GE Infinity S Power System

The GE Infinity S power system has 8 slots with a primary 48VDC output. The system also has a secondary +24VDC output, which is obtained by using 48 to +24VDC converters (not provided). The power system is also equipped with an alarm cable.

-48VDC distribution includes one 3A load breaker for the two fans (DAC) in the battery compartment and a 10A for the heat

exchanger. The following extra load breakers are also provided: one 3A, two 10A, six 15A and eight 20A.

Refer to the GE power supply documentation located inside the CUBE for information regarding the power supply operation and configuration.

**3.4 Heat Exchanger**

The 1880W heat exchanger in the equipment compartment has a speed controller and is connected to a 10A circuit breaker. The heat exchanger and an overheat thermostat are connected to a 10-position alarm block (refer to section 3.4.2).

The heat exchanger is a low power, long life, maintenance-free cabinet cooler that is mounted to the door. The closed loop unit transfers the heated internal air to the outside while pulling the cool ambient air to the inside. For more information, refer to the heat exchanger documentation found inside the CUBE.

**3.4.1 Direct Air Cooler (DAC) Operation**

The cooler consists of louvered filters and a shroud with dual 200CFM fans. The fans are connected to a thermostat. The wiring is routed to the equipment compartment. These should be connected to a 3A fuse or circuit breaker on the -48VDC power system.

On -48VDC systems, the red wire is connected to the (-) output of the fuse or breaker, while the black wire is connected to the return.

The fan’s thermostat is set at 30°C (+/-4 °C) at the factory. The thermostat will turn on at its set point and will not turn back off until the temperature has dropped 7 °C. The thermostat’s set point may be lowered or raised depending on ambient temperature outside. It has a range of 0 °C to 60 °C.

**3.4.2 Alarm Block Connections**

There is a 10-position, labeled alarm block in the equipment compartment for monitoring the following items (refer to Figure 4). The two wires on the door switches are connected to the top two positions (first and second) on the alarm block. These wires provide a normally closed connection when the doors are closed and an open connection if any door is open.

The third and fourth positions are used for monitoring the heat exchanger. These positions provide a normally closed connection when the heat exchanger is running normally and open upon a failure or if the unit is turned off.

The fifth and sixth positions are used for the Battery High Temperature (overheat) alarm.

**3.5 Cable Entrance**

Cable entrance is through a Roxtec port panel one 4”, 1x1, Microflect entry port.

**3.6 Verifying the Installation**

Verify that the earth ground and all grounding and bonding are complete and functional. After verifying that all installer connections are secure and complete, connect power to the CUBE.

**4. TECHNICAL ASSISTANCE AND REPAIR SERVICE**

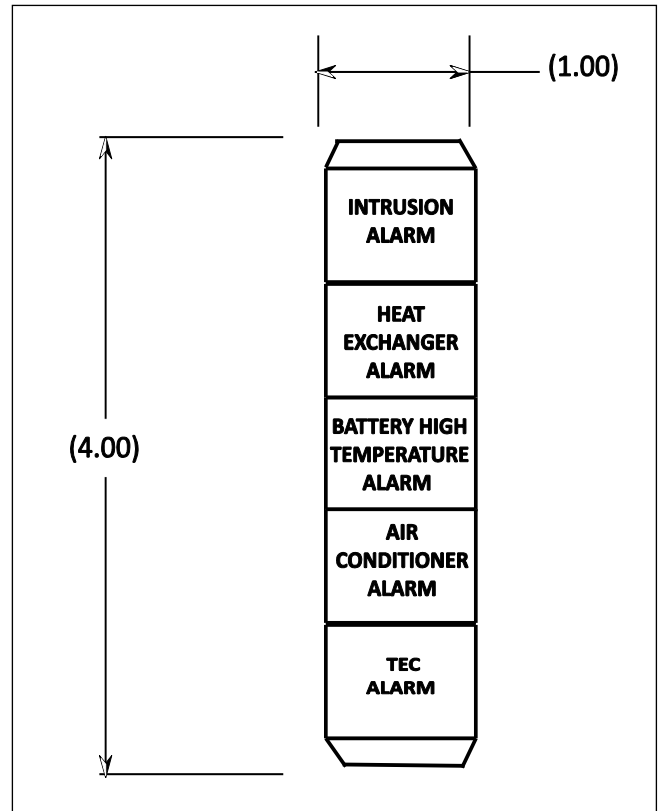
For questions on product repair or if technical assistance is required, contact Charles Technical Support at:

- 847-806-8500
- 800-607-8500
- 847-806-8556 (FAX)
- [techserv@charlesindustries.com](mailto:techserv@charlesindustries.com) (email)
- [http://www.charlesindustries.com/main/tech\\_support.htm](http://www.charlesindustries.com/main/tech_support.htm)

**5. WARRANTY & CUSTOMER SERVICE**

Charles Industries, Ltd. offers a one-year warranty on the CUBE product. The Charles warranty is limited to the operation of the CUBE hardware as described in this documentation and does not cover equipment which may be integrated by a third party. The terms and conditions applicable to any specific sale of product shall be defined in the resulting sales contract. For questions on warranty or other customer service assistance, contact your Charles Customer Service Representative at:

- 847-806-6300
- 847-806-6653 (FAX)
- [mktsev@charlesindustries.com](mailto:mktsev@charlesindustries.com) (email)
- [http://www.charlesindustries.com/main/telecom\\_sales\\_support.htm](http://www.charlesindustries.com/main/telecom_sales_support.htm)



**Figure 4 Alarm Block Diagram**



## 6. SPECIFICATIONS

### 6.1 Regulatory Specifications

- GR-487 certified
- UL60950 certified

### 6.2 Physical Specifications

The physical specifications are shown in Table 1.

Category	
Size and Weight	74"Hx32"Wx32"D 675 lbs.
Battery Tray Size	12.75"Hx21"Wx27"D
Materials: Cabinet Battery Trays	.125 welded aluminum 10GA steel
23" Equipment Rack Space	23RU (40") with EIA hole spacing
Color	Off-White
Equipment Heat Exchanger	Dantherm 1880W 48VDC P/N PS035055Z
48/24VDC Power System	GE Infinity S #CC150033100 (NES4824-23-AC5-PS8-DC1E rectifiers)
Fans: -48VDC Replacement Fan	Two 200CFM axial #18-950454-0
Fan Shroud and Rear Panel Filter	#39-000260-0
Covered Bus Bar	2-hole on .625" spacing with 1/4"-20 threaded holes and hex-head screws
Bonding and Grounding	Two 2x8-position ground bars in equipment compartment
Battery Type	48 NiCd (Saft Tel.X 180 (P/N 80-94693-02)
Replacement Gasket	#39-000352-0
Operating Temp. Range, Outside Enclosure	-40° to +115°F, -40° to 46°C
Operating Temp Range, Inside Enclosure	40° to +149°F, -40° to 65°
Humidity	0 to 95% (non-condensing)
Altitude	Up to 2,000 meters (6560 feet)

**Table 1 CUBE Physical Specifications**



Directing our energies for you.

# X7CAP-FRO-130

## 30° Azimuth Beam, 12.5 inches

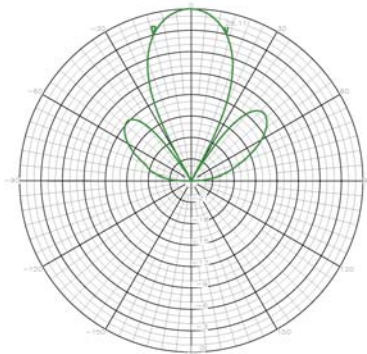
698-896 & 1710-2170 MHz DB Xpol

### Electrical Specifications

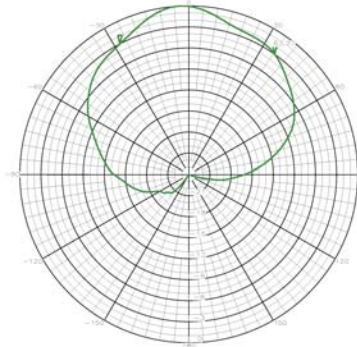
Frequency	698-896 & 1710-2170 MHz
Polarization	Slant +/- 45
Gain Low Band	11.3 dBi
Gain High Band	11.3 dBi
H-Beam Low/High Band (3dB Points)	30° / 30°
V-Beam Low/High Band (3dB Points)	65° / 65°
Electrical Downtilt	0°
VSWR / Return Loss	<1.70:1 / 11.7 dB
Front-to-Back at Horizon (LB/HB)	>24 dB / >18 dB
Impedance	50 Ohms
Power Input Per Connector	200 CW at 800 MHz
Isolation	<-25 dB
Intermodulation (2x20W)	<-150 dBc

### Mechanical Specifications

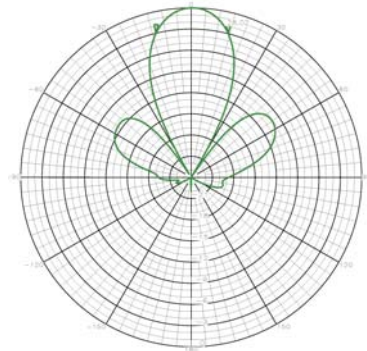
Input Connector (female)	Two Back Mounted Type N (silver finish)
Antenna Dimensions (LxWxD)	12.5 x 24.0 x 7.1 in. (318 x 610 x 180mm)
Antenna Weight	approx. 13.2 lbs
Bracket Weight	approx. 12.6 lbs
Lightning Protection	Direct Ground
RF Distribution	Printed Microstrip Substrate
Radome	Ultra High-Strength Luran
Weatherability	UV Stabilized, ASTM D1925
Radome Water Absorption	ASTM D570, 0.45%
Environmental	MIL-STD-810E
Wind Survival	150 mph
Front Wind Load @ 100MPH	62 lbs
Equivalent Flat Plate @ 100MPH	1.25 sq-ft. (c=2)
Mounting Brackets	Wall or Pole Swivel Mount
Bracket Adjustment Range	+/- 25° Lateral & +/- 55° Vertical



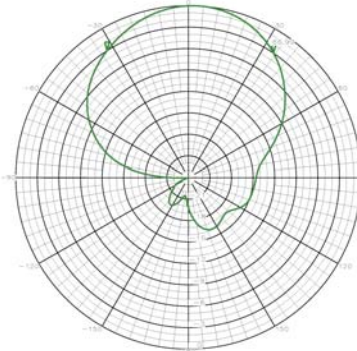
Typical High Band H-Beam



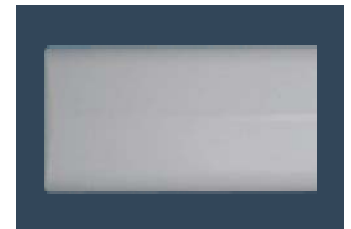
Typical High Band E-Beam



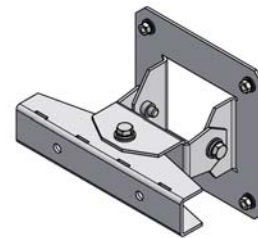
Typical Low Band H-Beam



Typical Low Band E-Beam

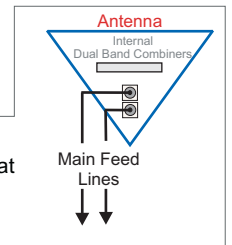


**1 Year Warranty**



### Available with Opt "i"

- The Opt "i" antenna option provides Integrated Diplexers that reduce mainline cables and eliminate separate external



## Ordering Information & Options

X7CAP-FRO-130-00i-n X-Pol, fast roll off, with 0 deg EDT on both bands with integrated diplexer, two back mounted Type-N connectors.

## **Exhibit C, Minimum Technical Standards**

850 B: TX 880.92MHz - 889.5MHz, RX 835.92MHz - 844.5MHz

B': TX 892.5MHz - 893.7MHz, RX 847.5MHz - 848.7MHz

700 C: TX 746MHz - 756MHz, RX 777MHz - 787MHz

700 Upper C: TX: 746-756MHz, RX: 777MHz-787MHz

AWS B: TX 2120MHz - 2130MHz, RX 1720MHz - 1730MHz

AWS J: TX 2170MHz - 2180MHz, RX 1770MHz - 1780MHz

PCS EF: TX 1965MHz - 1975MHz, RX 1885MHz - 1895MHz

**EXHIBIT D**

**Insurance**



# CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)  
07/02/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Aon Risk Services Northeast, Inc. New York NY Office 199 Water Street New York NY 10038-3551 USA	<b>CONTACT NAME:</b> PHONE (A/C. No. Ext): (866) 283-7122      FAX (A/C. No.): (800) 363-0105		
	<b>E-MAIL ADDRESS:</b>		
<b>INSURED</b> Verizon Wireless (VAW), LLC dba Verizon Wireless 1095 Avenue of the Americas New York NY 10036 USA	<b>INSURER(S) AFFORDING COVERAGE</b>		<b>NAIC #</b>
	<b>INSURER A:</b> National Union Fire Ins Co of Pittsburgh		19445
	<b>INSURER B:</b> New Hampshire Insurance Company		23841
	<b>INSURER C:</b> American Home Assurance Co.		19380
	<b>INSURER D:</b> Illinois National Insurance Co		23817
	<b>INSURER E:</b> <b>INSURER F:</b>		

Holder Identifier :

**COVERAGES**      **CERTIFICATE NUMBER: 570072162020**      **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. **Limits shown are as requested**

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GENL AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			GL4611607	06/30/2018	06/30/2019	EACH OCCURRENCE \$2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$2,000,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$2,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000
A	<b>AUTOMOBILE LIABILITY</b>			CA 461-15-19 AOS	06/30/2018	06/30/2019	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000
A	<input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY			CA 461-15-20 MA	06/30/2018	06/30/2019	BODILY INJURY (Per person)
A	<input type="checkbox"/> SCHEDULED AUTOS			CA 461-15-21 VA	06/30/2018	06/30/2019	BODILY INJURY (Per accident)
A	<input type="checkbox"/> HIRED AUTOS ONLY			See Next Page	06/30/2018	06/30/2019	PROPERTY DAMAGE (Per accident)
	<b>UMBRELLA LIAB</b>						EACH OCCURRENCE
	<b>EXCESS LIAB</b>						AGGREGATE
	DED    RETENTION						
B	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>			WC014590551 AOS	06/30/2018	06/30/2019	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER
C	ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	WC014590550 CA	06/30/2018	06/30/2019	E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE-EA EMPLOYEE \$1,000,000 E.L. DISEASE-POLICY LIMIT \$1,000,000

Certificate No : 570072162020

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)**  
The City and County of Denver, its elected and appointed officials, employees and volunteers are included as Additional Insured with respect to the General Liability policy.

**CERTIFICATE HOLDER****CANCELLATION**

City and County of Denver a Municipal Corporation Attn: Real Estate 201 W. Colfax Avenue, Dept. 1010 Denver CO 80202 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	<b>AUTHORIZED REPRESENTATIVE</b>  <i>Aon Risk Services Northeast, Inc.</i>

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# ADDITIONAL REMARKS SCHEDULE

AGENCY Aon Risk Services Northeast, Inc.		NAMED INSURED Verizon Wireless (VAW), LLC	
POLICY NUMBER See Certificate Number: 570072162020			
CARRIER See Certificate Number: 570072162020	NAIC CODE	EFFECTIVE DATE:	

**ADDITIONAL REMARKS**

**THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM, FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance**

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER	
INSURER	
INSURER	
INSURER	

**ADDITIONAL POLICIES** If a policy below does not include limit information, refer to the corresponding policy on the ACORD certificate form for policy limits.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS
	AUTOMOBILE LIABILITY						
A				CA 774-22-65 NH - Primary	06/30/2018	06/30/2019	
A				CA 774-22-66 NH - Excess	06/30/2018	06/30/2019	
	WORKERS COMPENSATION						
D		N/A		WC014590552 FL	06/30/2018	06/30/2019	
B		N/A		WC014590553 ME	06/30/2018	06/30/2019	
B		N/A		WC014590549 NJ, NY, TX, VA	06/30/2018	06/30/2019	
B		N/A		WC014590554 MA, ND, OH, WA, WI, WY	06/30/2018	06/30/2019	