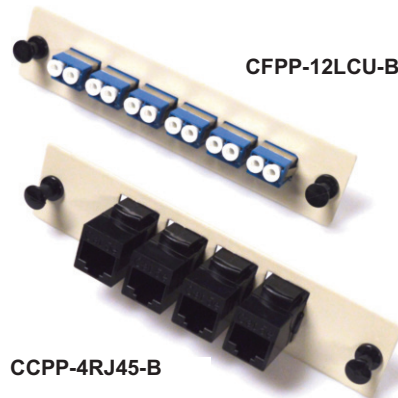


# Charles Fiber and Ethernet Terminal (CFIT-FE) Outdoor Demarcation Enclosure



CFIT-FE-100



CFPP-12LCU-B

CCPP-4RJ45-B

The CFIT-FE-100 Terminal is a compact, outdoor enclosure designed as an Ethernet demarcation point in the outside plant. The enclosure can be mounted to an exterior building wall or h-frame, providing secure and easy access to technicians. The interior features a security door that divides access between the service provider's and the leased line provider's connections on the bulk plate. Four patch plate slots allow push-pin patch plates to be installed on an as-needed basis. Patch plate options include 12-port fiber LC/UPC adapter panels and 4-port RJ45 Ethernet adapter panels. Both the service provider compartment and the leased line compartment have cable routing guides and strain relief bars conveniently placed near the patch plate bulkhead for cable slack storage. An external ground stud is located on a side wall, and a swing-out door with ID label can be held in an open position with included wind latch.

Dimensions: 13"H x 16"W x 6"D  
 Construction: Aluminum  
 Finish: Off-White Powder Coated  
 Weight (empty): 10 lbs.  
 Operating Temp Range: -40° to +115°F (-40° to +46°C)  
 Humidity: 0 to 95% (non-condensing)  
 Security: Two 216-Tool Quarter-Turn Latches with one padlockable hasp  
 Cable Ingress/Egress: Two 1.75"/2.50" Knockouts

<u>Mat Code</u>	<u>Description</u>	<u>Charles Part #</u>
1452660	CFIT-FE-100 Fiber/Ethernet Out Terminal, four patch plate slots, one included 6 duplex LC/UPC adapter port plate, inner security door, wind latch door with two 216-tool latches, wall/pole mounting brackets	CFIT-FE-100
1452574	Fiber Patch Plate, 6 duplex LC/UPC adapters	CFPP-12LCU-B
1452505	Ethernet Patch Plate, 4 RJ45E adapters	CCPP-4RJ45-B

**LUMEN**<sup>®</sup>

Prepared for Lumen, May 2021

OG-OSP044-E21

For additional product information, please visit [www.charlesindustries.com](http://www.charlesindustries.com)

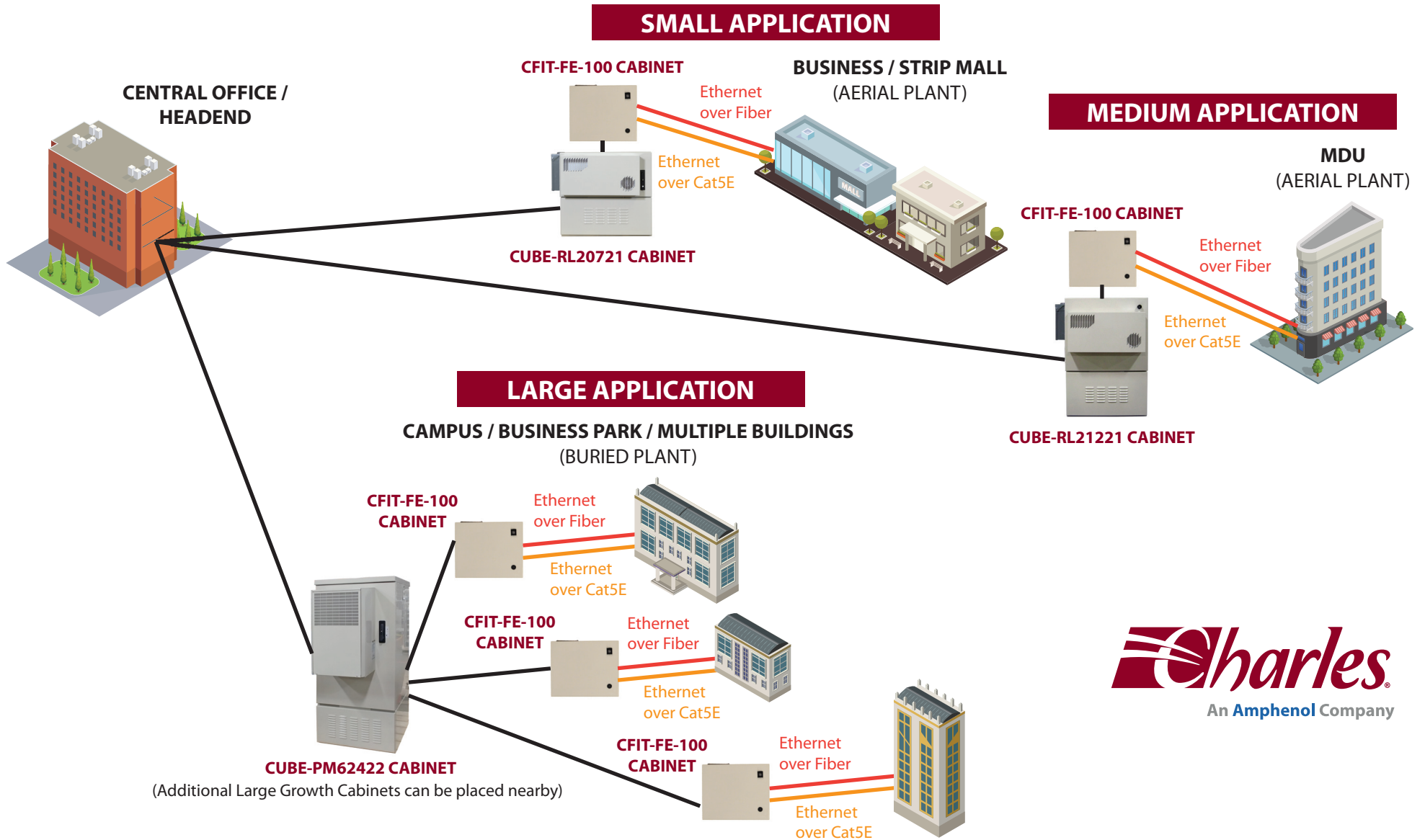
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 Web: [www.charlesindustries.com](http://www.charlesindustries.com)



# Charles Fiber and Ethernet Terminal (CFIT-FE) Outdoor Demarcation Enclosure



OG-OSP044-E21

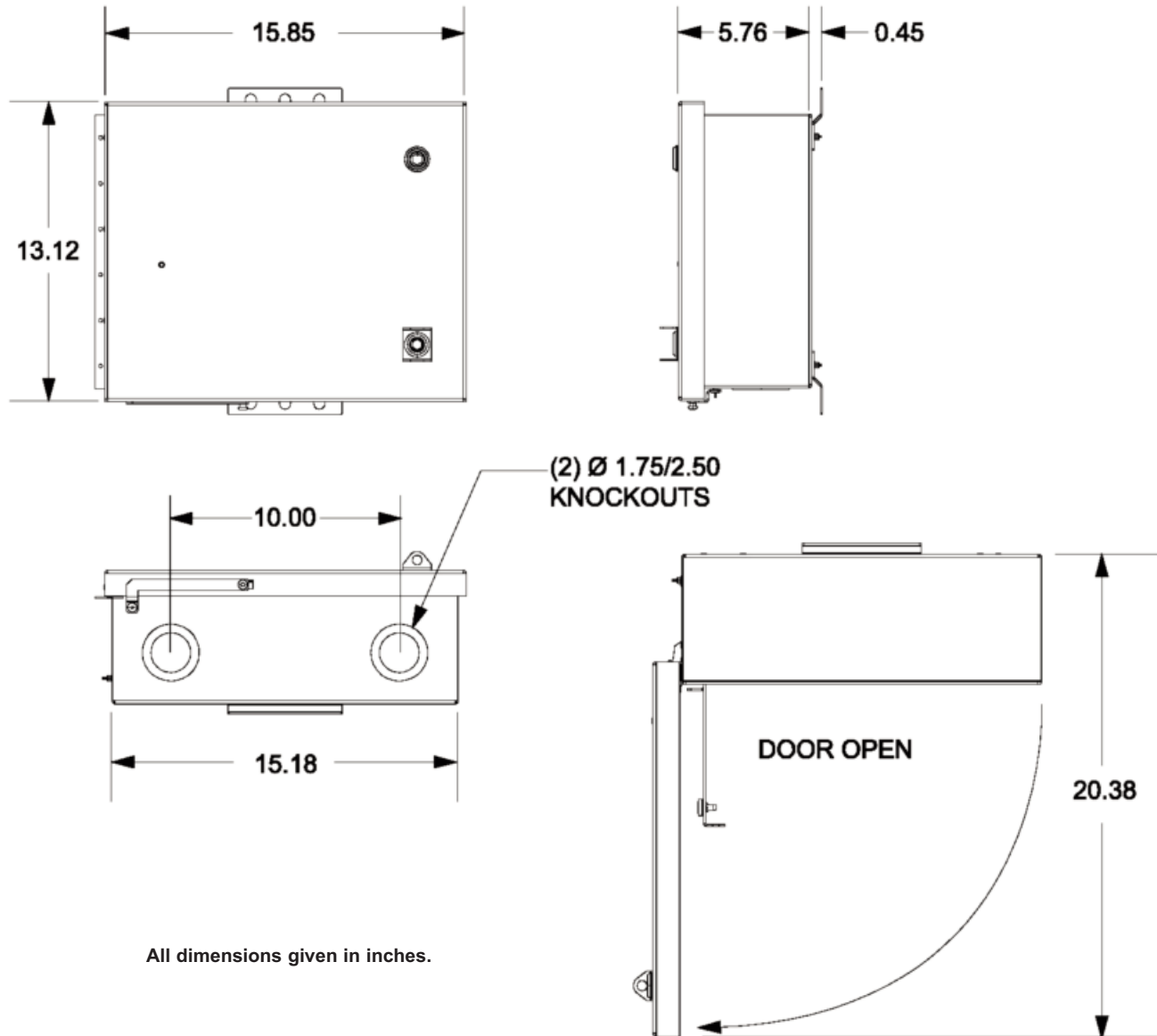
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# Charles Fiber and Ethernet Terminal (CFIT-FE) Outdoor Demarcation Enclosure



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**Charles**

# Charles Universal Broadband Enclosures (CUBE) RL207/212 Series Ethernet Equipment / Power Support Cabinet



**CUBE-RL207**



**CUBE-RL212**

Charles' CUBE-RL207 and 212 Series cabinets provide environmental protection for a wide variety of telecom applications, including wireless, fiber transport for cell site backhaul, and other remote outdoor applications where 48 VDC is required. They may be used to house Ethernet equipment and a power source, and in conjunction with a Charles CFIT-FE Fiber and Ethernet Terminal, to provide Ethernet over Fiber or Ethernet over Cat5E Cable. Commercial AC power is converted to 48 VDC using a third-party rectifier (supports most major manufacturers).

The RL207 Cabinet provides 7RU of equipment mounting space, while the RL212 Cabinet has 12RU. Both series provide a separate battery chamber designed for housing one string of HAZE TEL 40F batteries.

### Specifications

Overall Dimensions . . . . .	27"H x 28"W x 20"D (RL207), 39"H x 26"W x 20"D (RL212)
Equipment Chamber . . . . .	14"H x 28"W x 20"D (RL207), 24"H x 26"W x 20"D (RL212)
Door Lock . . . . .	Padlockable, 216-Style Lock
AC Equipment . . . . .	8 Position Load Center with 60A Main Breaker, (3) 15A Breakers, (1) GFCI Receptacle and (1) RayCap AC2080-02W SPD
Battery Chamber . . . . .	13"H x 28"W x 20"D (RL207), 15"H x 26"W x 20"D (RL212)
Capacity . . . . .	Supports 1 String HAZE TEL 40F Batteries (not included)
Cooling . . . . .	Vented with -48VDC Fan
Bonding & Grounding . . . . .	8 Position, 2 Row Ground Bar inside Bottom Mount, Double Lug Earth Ground External Back Side
Cable Entrance . . . . .	(2) 1" Knockouts and (1) 1.25"/2.0 Knockout for Conduit Fittings on Bottom, (3) 1.25"/2.0" Knockouts for Conduit Fittings on Right-Hand Side
Thermal Management . . . . .	-48VDC 580 Watt Heat Exchanger
Construction . . . . .	1/8" Welded Aluminum, Off-White Finish
Mounting . . . . .	Wall or H-Frame, Pole Mount Kit optional (97-CABPMTKIT), 10" Plinth optional (97-PM4XPLINTH-A)

**LUMEN®**

Prepared for Lumen, May 2021

### ACCESSORIES



Part Number	Description
97-CABPMTKIT	Kit, Pole Mount Hardware
97-001971-A	Kit, H-Frame Hardware
97-004509-A	12-Position Ground Bar Kit (Field Installed)
97-PM4XPLINTH-A	10" Plinth for CUBE RL207 Series, 10"H x 28"W x 20"D
97-002176-A	10" Plinth for CUBE RL212 Series, 10"H x 26"W x 20"D

Charles Part #	Standard Mounting	Overall Dimensions (in.)	RU	Equipment Chamber Dimensions (in.)	Battery Chamber Dimensions (in.)	Battery Support	Load Center	Thermal	Weight Empty (lbs.)	Weight w/Ni-Cd Battery
CUBE-RL20721ABJ	Wall/H-Frame	27x28x20	7	14x28x20	13x28x20	1 String HAZE Tel 40F	8 Position	580W 48VDC HX	170	372
CUBE-RL21221ABJ	Wall/H-Frame	39x26x20	12	24x26x20	15x26x20	1 String HAZE Tel 40F	8 Position	580W 48VDC HX	190	392

For additional product information, please visit [www.charlesindustries.com](http://www.charlesindustries.com)

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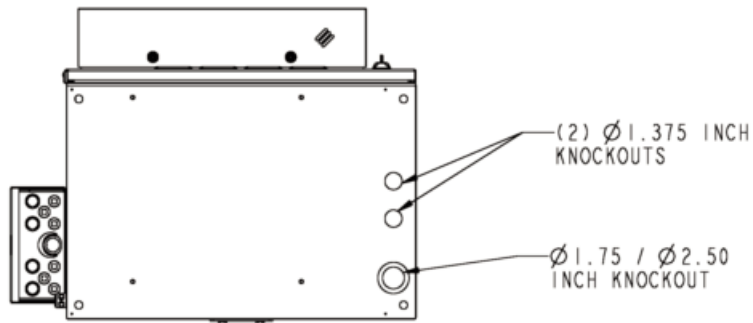
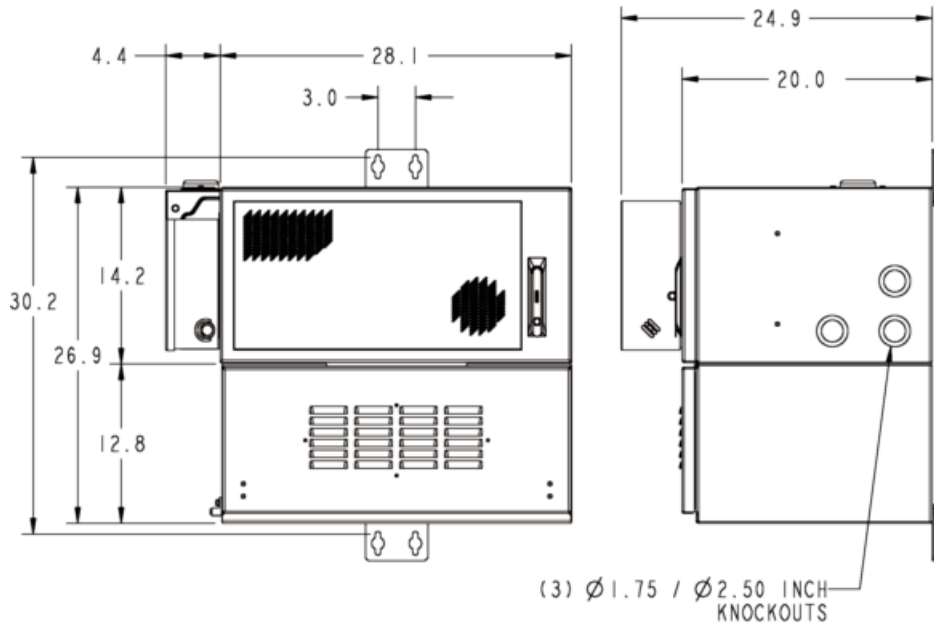
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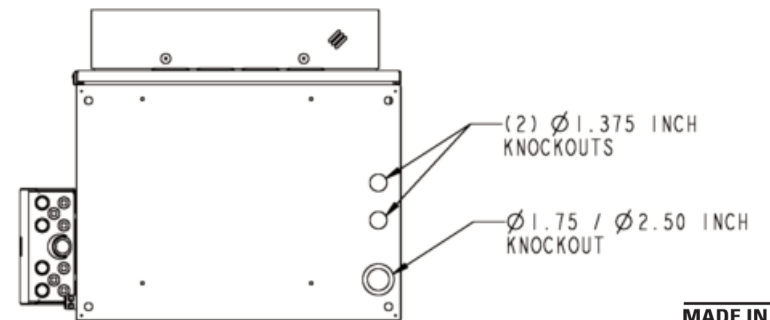
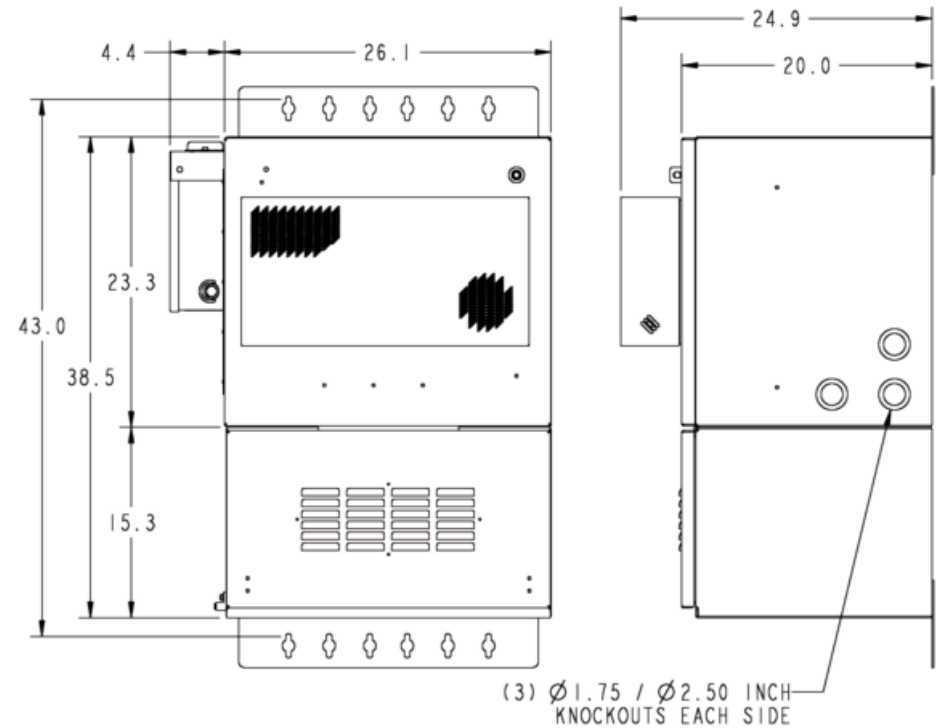


# RL207/212 Series Ethernet Equipment / Power Support Cabinet

## CUBE-RL207 Dimensions



## CUBE-RL212 Dimensions



All units in inches

OG-OSP044-E21

# Charles Universal Broadband Enclosures (CUBE) PM62422 Series Equipment and Battery Enclosure



**CUBE-PM62422**



**LUMEN**<sup>®</sup>

Prepared for Lumen, May 2021

Charles' CUBE-PM62422 is a pad mount enclosure featuring an equipment compartment that includes 24RU of 23" horizontal rack mount spacing, a 12-position AC load center with a 30A generator inlet, and an 1880W DC powered heat exchanger. The battery compartment includes a slide-out battery tray with straps that supports one string of customer supplied 200Ah, -48VDC, VRLA batteries.

The CUBE-PM62422ME2 is used as the initial cabinet placement. The CUBE-PM62422MN1 is designed as a large growth cabinet to be placed alongside the initial cabinet placement.

### Specifications

- Overall Dimensions . . . . . 64"H x 32"W x 32"D
- Equipment Chamber . . . . . 42" (24RU) rack spacing with tapped EIA #12-24 mounting holes
  - Door Lock . . . . . Padlockable, 216-Style Lock
  - AC Load Center . . . . . Square D QO112L125GRB
- Battery Tray Size . . . . . 13"H x 20"W x 22"D
  - Capacity . . . . . One string -48VDC VRLA, 200Ah
- Bonding & Grounding . . . . . Two 2x12 position ground bars inside equipment compartment, two external ground studs on the sides of the equipment compartment
- Thermal Management . . . . . -48VDC 1880 Watt Heat Exchanger
- Operating Temp Range . . . . . -40° to +115°F, -40° to 46°C (Outside Enclosure)  
-40° to +149°F, -40° to 65°C (Inside Enclosure)
- Construction . . . . . 1/8" Welded Aluminum, Off-White Finish
- Mounting . . . . . Pad Mount

### ACCESSORIES

Part Number	Description
97-004509-A	12 position 1/4x20 x 5/8" dual studs, hex nuts & washers field install ground bar kit

Charles Part #	Standard Mounting	Overall Dimensions (in.)	RU	Equipment Chamber Dimensions (in.)	Battery Chamber Dimensions (in.)	Battery Support	Load Center	Thermal	Weight Empty (lbs.)	Weight w/VRLA Batteries
CUBE-PM62422ME2	Pad	64x32x32	24	46X32X32	16x32x32	1 String 200 Ah VRLA Batteries	12 Position	1880W 48VDC HX	510	1020
CUBE-PM62422ME3	Pad	64x32x32	24	46x32x32	16x32x32	1 String 200 Ah VRLA Batteries	12 Position	4K HVAC 48VDC	510	1020
CUBE-PM62422ME5	Pad	64x32x32	24	46x32x32	16x32x32	1 String 200 Ah VRLA Batteries	12 Position	4K HVAC / 1880W HX 48VDC	615	1135
CUBE-PM62422MN1	Pad	64x32x32	24	46x32x32	16x32x32	1 String 200 Ah VRLA Batteries	None	1880W 48VDC HX	495	1005
CUBE-PM62422MN2	Pad	64x32x32	24	46x32x32	16x32x32	1 String 200 Ah VRLA Batteries	None	1880W 48VDC HX	495	1005

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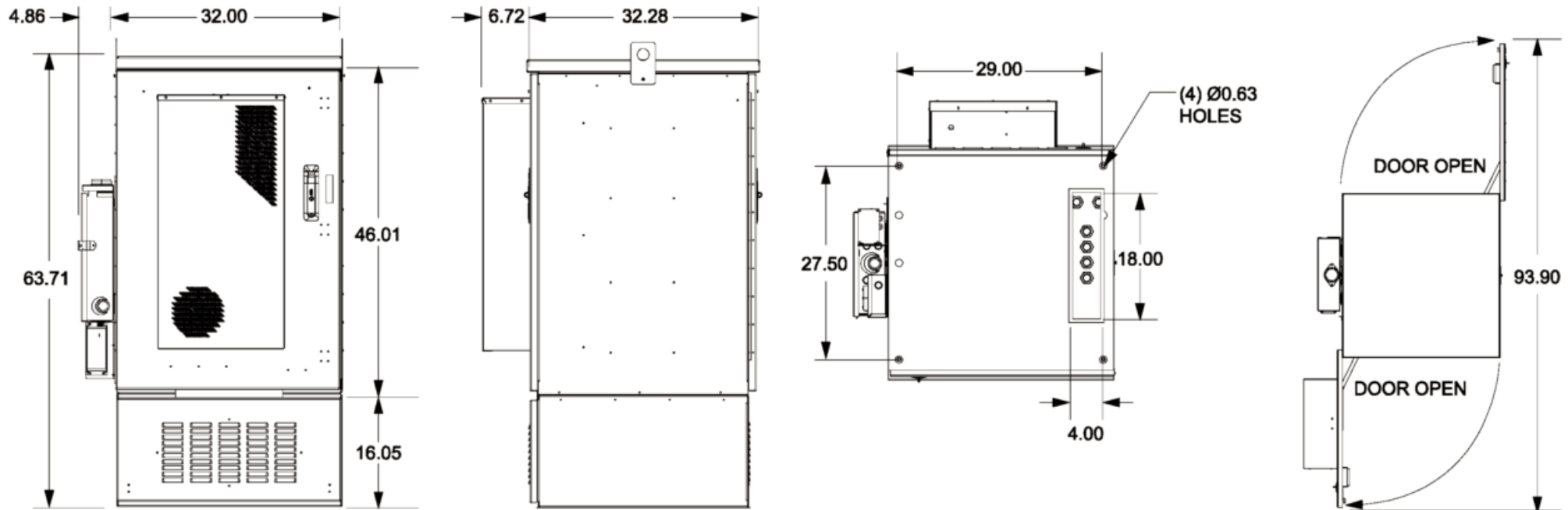
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# RL207/212 Series Ethernet Equipment / Power Support Cabinet

## CUBE-PM62422 Dimensions



All units in inches

MADE IN THE  
USA

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**Charles**