



CUBE Modular Cabinet Series



Shown:
Modular Cabinet 4-Bay MC-1 Solution

Flexible Multiple Bay Cabinets Allow for Field Expansion with Placement of Additional Bays

Charles Modular Cabinets offer the ultimate in flexibility for outdoor enclosure deployments. Multiple standard bays can be mixed and matched into a multitude of different configurations to suit a specific application. The cabinet lineup can be built and shipped direct from the Charles factory in the desired configuration. Additional bays can be ordered separately at a later date to be added in the field to accommodate growth. Standard bay types include relay rack bays to support power and active electronics, passive fiber management, and battery bays to support multiple strings of 12V Monoblock batteries. Options include different thermal management systems for bays needing cooling, internal or external AC power panels, integrated AC-DC power systems, fiber panels, and plinths. Thermal management systems are door mounted and can be added / changed out in the future as cooling needs change.

Modular Cabinets are available in three different sizes (size per bay):

MC-1 (small)	62"H x 32"W x 32"D	31RU Equipment Space (front/back)
MC-2 (medium)	74"H x 32"W x 36"D	38RU Equipment Space (front/back)
MC-3 (large)	84"H x 32"W x 36"D	43RU Equipment Space (front/back)

Specifications:

Construction:	0.125" Aluminum Welded Construction Outer Enclosure, Powder Coated Off White Finish
Mounting Style:	Pad Mount

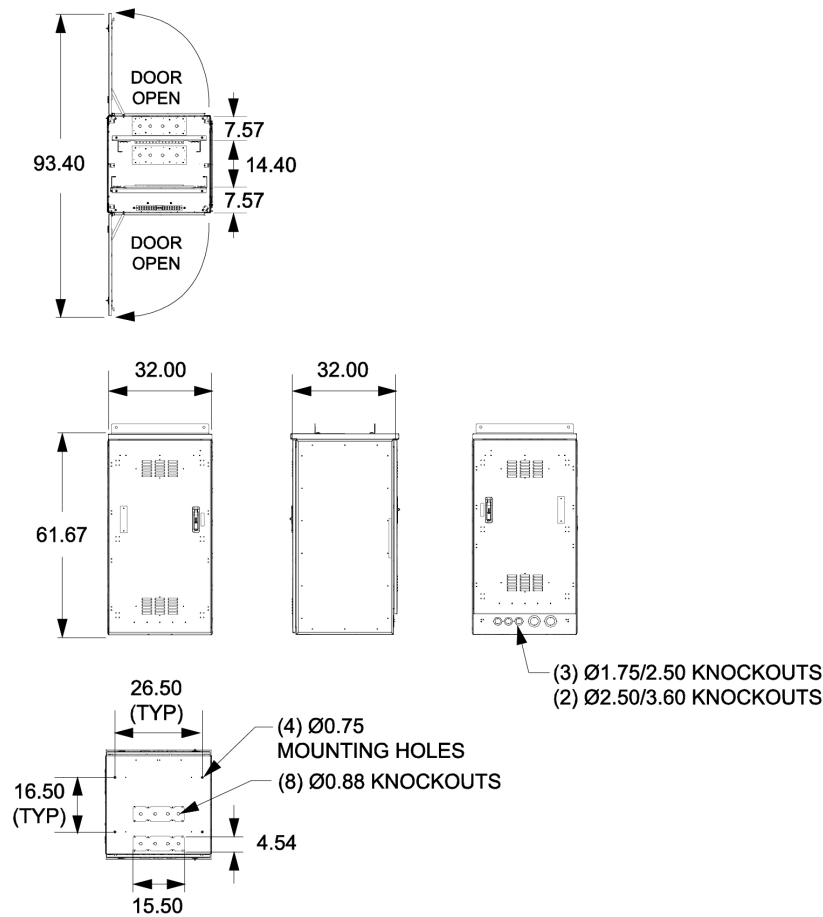


Shown: Modular Cabinet 2-Bay MC-1 Solution

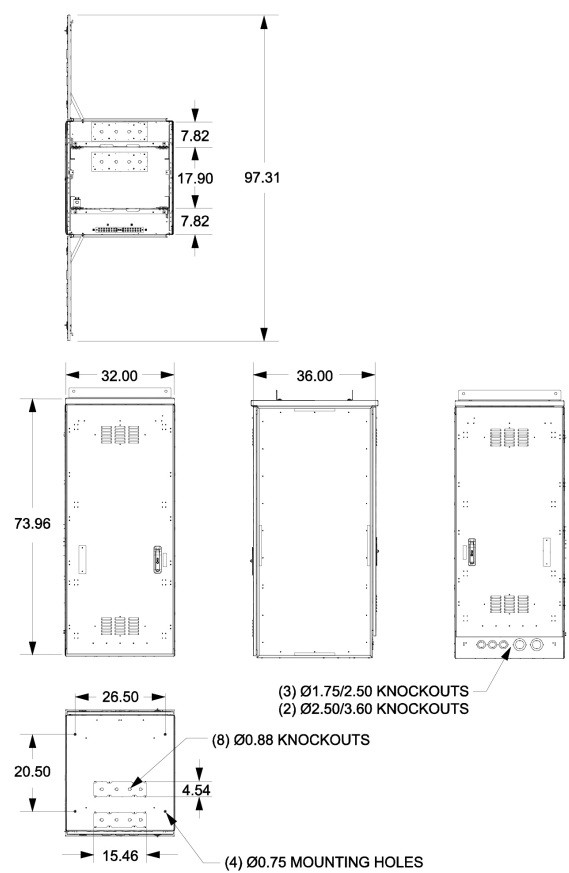
Product Dimensions

All dimensions are in inches

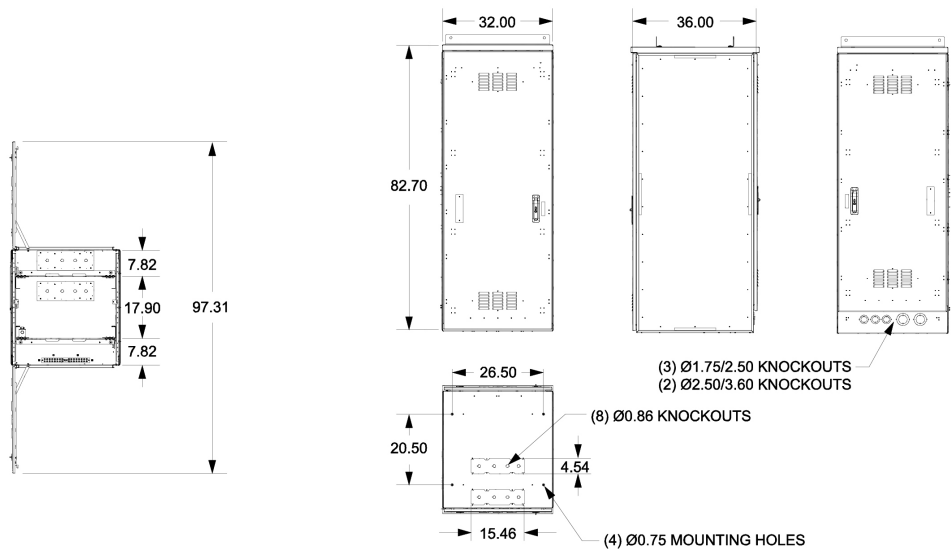
CUBE MC-1 DIMENSIONAL VIEWS (SINGLE BAY)



CUBE MC-2 DIMENSIONS (SINGLE BAY)



CUBE MC-3 DIMENSIONS (SINGLE BAY)



MODULAR CABINET PART NUMBER CONFIGURATOR

Series Equipment Compartment
Doors & Mounting Style 1st Bay Style 1st Bay Thermal 2nd Bay Style 2nd Bay Thermal 3rd Bay Style 3rd Bay Thermal 4th Bay Style 4th Bay Thermal Power Configuration Number

MC- **A** **B** **C** **D** **C** **D** **C** **D** **C** **D** **E** **F**

For Values A through E, choose desired option from the corresponding column below.

A. Series

- 1 = 62"H x 32"W x 32"D
- 2 = 74"H x 32"W x 36"D
- 3 = 84"H x 32"W x 36"D

B. Equip Compartment Doors & Mounting Style

- 2 = Front and Rear Door
- 5 = Front Door, Rear Panel

C. Bay Styles

- A = Modular Equipment Bay w/ (2) Rack Mount Battery Trays
- B = Modular Battery Bay
- C = Shelf for Power Supply, (2) Shelves for Batteries, (2) Rear Strands for Mounting Outdoor Nodes
- D = Battery trays with Rack Space Above, Vented
- E = Modular Equipment Bay
- F = Modular Passive Fiber w/ LGX panels

D. Bay Thermal

- 2 = 2000 BTU 48VDC HVAC
- 5 = 6000W Thermosiphon (CTMS)
- 6 = 6000 BTU 48VDC HVAC
- 7 = 17000 BTU 48VDC HVAC
- C = 12000 BTU 48VDC HVAC
- D = 750W 48VDC Heat Exchanger
- F = Direct Air Cooler (DAC)
- G = Vented Only
- H = Vented w/ Fans
- J = 4000 BTU 120VAC HVAC
- K = 4000 BTU 48VDC HVAC
- L = 10000 BTU 48VDC HVAC
- M = 1880W 48VDC Heat Exchanger
- N = None
- R = 24000 BTU 48VDC HVAC
- T = 3500W 48VDC Heat Exchanger
- U = 10000 BTU 240VAC HVAC
- V = (2) 10000 BTU 48VDC HVAC
- Y = (2) 10000 BTU 240VAC HVAC

E. Power

- C = 12 Position AC Load Center
- D = 30 Position AC Load Center, 50A Generator Receptacle
- E = 8 Position AC Load Center, 30A Generator Receptacle
- F = 12 Position AC Load Center, 30A Generator Receptacle
- J = 20 Position AC Load Center
- K = 16 Position AC Load Center
- M = 8 Position AC Load Center, 30A Generator Receptacle, 150A Ringless Meter Socket
- N = No power
- P = 16 Position AC Load Center, 50A Generator Receptacle
- T = 30 Position AC Load Center
- U = 16 Position AC Load Center, 50A Generator Receptacle, 150A Ringless Meter Socket
- V = 14 Position AC Load Center / 100A Ring Type Meter Socket Combo
- Y = 24 Position AC Load Center

F. Configuration

Charles will assign configuration #, use "1" as default

Sample Part Numbers:

MC-25BHEHN1

- Modular Cabinet, Medium (74"H x 32"W x 36"D), Front Door and Rear Panel, No Power
- 1st Bay: Modular Battery Bay, Vented with Fan
- 2nd Bay: Modular Equipment Bay, Vented with Fan

MC-12BJBJEJFNK1

- Modular Cabinet, Small (62"H x 32"W x 32"D), Front and Rear Doors, 16 Position AC Load Center
- 1st Bay: Modular Battery Bay with 4000 BTU HVAC 120VAC
- 2nd Bay: Modular Battery Bay with 4000 BTU HVAC 120VAC
- 3rd Bay: Modular Equipment Bay with 4000 BTU HVAC 120VAC
- 4th Bay: Modular Passive Fiber with no power

Additional Installation Kits And Factory Options

The following accessories are available to complement Modular Cabinet configurations.

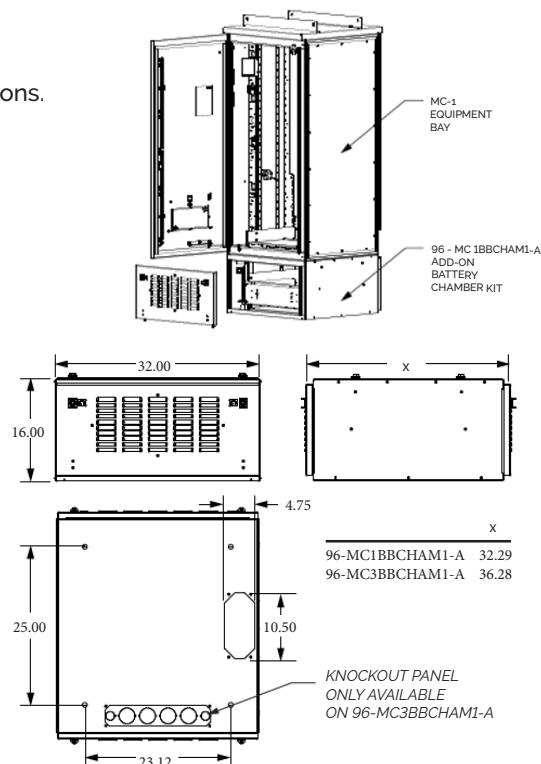
Battery Chamber Add-on Kits (Factory Installed)

Battery Chamber Add-on Kits provide an additional battery compartment installed beneath the equipment bay. The kit includes:

- Single battery tray (600 lbs maximum capacity)
- Removable front and rear access panels
- 100W thermostat-controlled heater pads
- 100A battery disconnect breaker

Important Notes:

- Battery chamber kits are installed at the Charles Industries factory prior to shipment.
- If a battery chamber is ordered, it must be added to every bay in the cabinet configuration, so all bays remain the same height.
- Battery chamber kits cannot be ordered with battery bays due to mounting differences.



MC-1/ME-1 Battery Chamber Kits

Cabinet Configuration	Part Number
1 Bay	96-MC1BBCHAM1-A
2 Bays	96-MC1BBCHAM2-A
3 Bays	96-MC1BBCHAM3-A
4 Bays	96-MC1BBCHAM4-A

MC-2/ME-2/MC-3/ME-3 Battery Chamber Kits

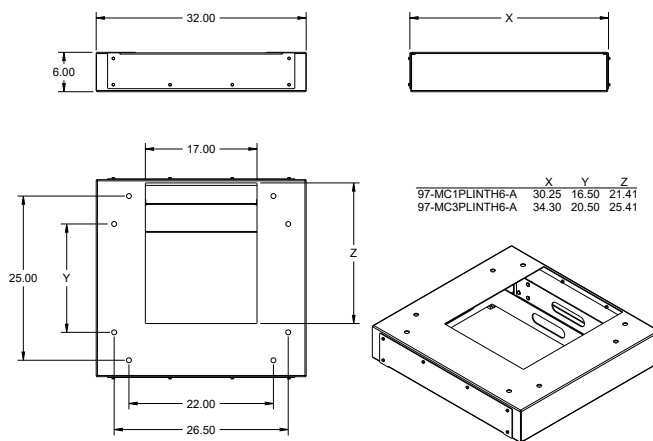
Cabinet Configuration	Part Number
1 Bay	96-MC3BBCHAM1-A
2 Bays	96-MC3BBCHAM2-A
3 Bays	96-MC3BBCHAM3-A
4 Bays	96-MC3BBCHAM4-A

Plinth Mounting Kits (Field Installed)

Plinth Mounting Kits provide additional mounting height for Modular Cabinets and are shipped separately for installation at the job site.

Compatible Cabinet	Part Number
1 MC-1/ME-1 Bay	97-MC1PLINTH6-A
MC-2/ME-2/MC-3/ME-3	97-MC3PLINTH6-A

- Plinth Mounting Kits are shipped separately and installed at the job site.
- Plinth Mounting Kits are not compatible with cabinets that include a separate factory installed battery compartment as described above.



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