Collider™ PoE-8/16   802.3bt

#COL-PoE-##@C

Product Overview:

Collider™ is a Plenum-Rated Rack-Mount, din mount, or wall-mount PoE 802.3 bt midspan device used to add up to sixteen PoE motors, 2 SFP ports & a 485 bus segment for user controls. It has multiple power options including Photovoltaic (PV), Energy Storage (ESM), Passive PoE (DC), and Alternating Current (AC). This power distribution unit (PDU) can be joined together horizontally or vertically to allow for up to 32 PoE motors to be installed in 1RU space or can be stacked together inside a 20" wall box. The product can be used as a stand-alone solution for small PoE window treatment systems or it can be scaled for larger systems with additional hubs and other PDU's.

Technical Specifications:

- Power Inputs:
  PV 52.7V 1.5A (2 pin PowerCON up to 8 AWG)
  DC 48-56VDC 1.5A (1/2 RJ45)
  ESM 16.8/8.4KWh 44/22A (Triphylite LiFePO4)
  AC 90 ~ 264 VAC (47-63 Hz) 1.2/2.4A (1/2 C14)
- Data In/Outputs:1G (2 SFP, 16 RJ45) 802.3af/at/bt ++
- 485 In/Outputs: 2 (RJ45) ports used for DC & Control
- Dimensions: (1.75 in. H) x (8.51 in. W) x (14 in. D)
          (4.3cm H) x (21.58cm W) x (24.81cm D)
- Maximum Wiring Distance
  - Motor ports: Up to 100m per motor port.
          STP with minimum 23AWG
  - 485 ports: Up to 100m.
          UTP with minimum 23AWG
- Shipping Weight: 16.1 lbs. [15.77kg] Ambient Temp
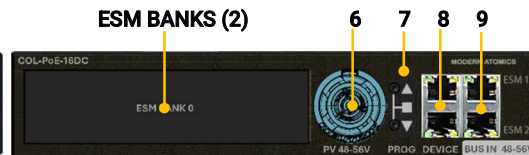- Material: Powder coated steel enclosure

Features summary:

- NO NETWORKING KNOWLEDGE REQUIRED
- **NO FANS**
- Support for Bond Bridge Pro
- Support for 485 wall switch keypads, and RF transceivers
- Support for GPI/O and 12v Triggers
- Qualified Motor Support.
  BTX 1/2/4Nm
  Power Shades 1/2/4/8Nm
  Shade Revolutions 1/2Nm
  Somfy 1.5/2/4/6Nm
- No Cobalt or any other conflict minerals
- 10-YEAR Transferable Warranty
- #COL-PoE-08AC – 8 bt ports (1) AC connection   PoE Budget 0.3kW
- #COL-PoE-08DC – 8 bt ports (2) DC & (1) PV connections PoE Budget 1.2kW
- #COL-PoE-16AC – 16 bt ports (2) AC connections   PoE Budget 0.6kW
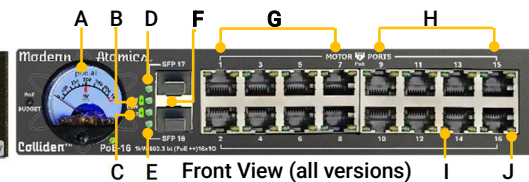- #COL-PoE-16DC – 16 bt ports (2) DC $ (2) PV connections PoE Budget 1.2kW

Connections & Indicators:
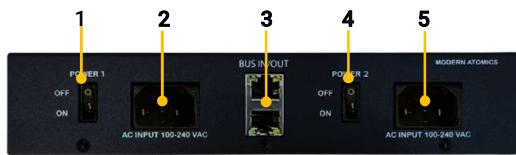
Rear View (AC Versions)

ESM BANKS (2)

Rear View (DC Versions)

Front View (all versions)

ELEMENT		REAR PANEL DESCRIPTIONS
1	Power switch*	Port 9-16 Recessed Power Switch
2	AC INPUT*	Port 9-16 AC Power Input (C14)
3	BUS IN/OUT	485 DEVICE BUS (Non-Powered)
4	Power switch	Port 1-8 Recessed Power Switch
5	AC INPUT	Port 1-8 AC Power Input (C14)
6	PV INPUT	Neutrik NAC3FPX 1-2 Solar Panels
7	TEST/PROG^	Motor Test / Programming Keys
8	Device Ports	485 / Wired keypads /Transceivers
9	BUS IN/DC IN	ESM Harvesting Ports @ 1.2kW

ELEMENT		FRONT PANEL DESCRIPTIONS
A	Watt Meter	Total current wattage output/ PoE Budget
B	POWER LED	Port 8-16 Power Indicator
C	POWER LED	Port 1-8 Power Indicator
D/E	SFP LEDS	On when SFP modules present & Data Act
F	SFP PORTS	Gigabit Fiber/Copper Network Uplinks
G	PoE Ports	1-8 Gigabit 802.3 af/at/bt ++ ports
H	PoE Ports*	9-16 Gigabit 802.3 af/at/bt ++ ports
I	LINK LED	Port 1-16 PoE Link and Ethernet Speed
J	DATA LED	Port 1-16 Data Activity

*on #COL-PoE-16AC version ^on #COL-PoE-08DC version

SHIPPING IN Q4 2025

Collider™ PoE

#COL-PoE-##@C

8.51" [215.08mm]

1.75" [43mm]

802.3bt

PoE

Dimensions:

SIDE X 2

14" [248.10mm]

(10) Universal Mounting Points
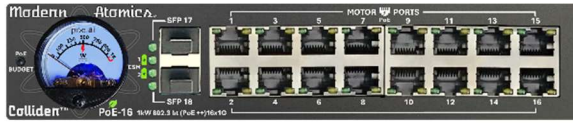
BOTTOM
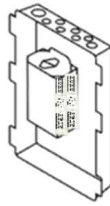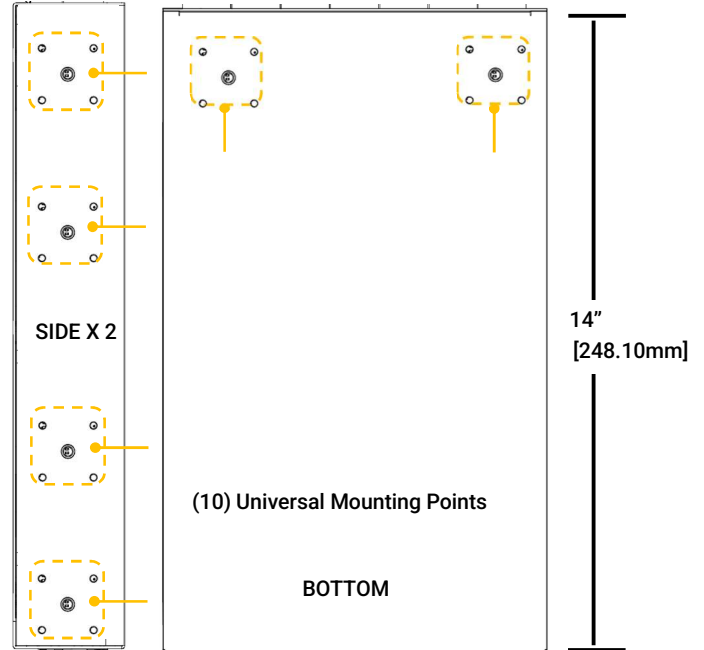
Mounting Options:

DIN RAIL

IN-WALL ENCLOSURE

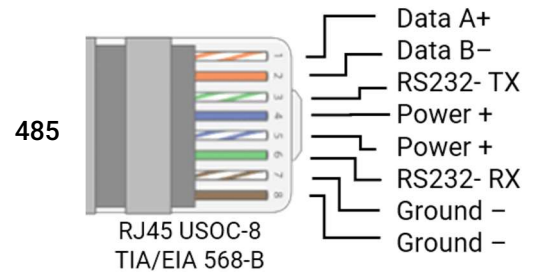**WHEN RACK MOUNTING, MUST USE BOTH FRONT AND REAR RAILS**

Included in Box:

(1) Collider PDU

(1/2) 2m IEC AC Cable (C13) (AC VERSIONS only)

(4) Universal Rack Ears

(2) Universal Din Rail Brackets with stop

(8) #10-32 Rack Screws

(10) M3.5 Universal mounting screws

(1/2) DC Injectors (DC Versions only)

SAFETY STANDARD APPROVAL (UL ONLY ON AC VERSIONS)

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GS geprüfte Sicherheit

CE

CCC

Cable pinouts:

PoE

1	TxRx A+ / DC +
2	TxRx A - / DC +
3	TxRx B+ / DC +
4	TxRx C+ / DC +
5	TxRx C - / DC +
6	TxRx B - / DC -
7	TxRx D+ / DC -
8	TxRx D - / DC -

RJ45 USOC-8
TIA/EIA 568-B

485

1	Data A+
2	Data B−
3	RS232- TX
4	Power +
5	Power +
6	RS232- RX
7	Ground −
8	Ground −

RJ45 USOC-8
TIA/EIA 568-B

Modern Atomics