



Collider™ PoE-16

#COL-PoE-16

802.3bt



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 & fourteen device ports to a 485 bus segment. The rear PoE motor ports can support up to 100m of STP (Min 23AWG) data wiring to Somfy® range of PoE powered motors. The half-rack sized enclosure can be joined together to allow for up to 32 PoE motors to be installed in 1RU or can be stacked together inside a 20" wall box. The product can be used as a stand-alone solution in small PoE systems with up to 13 control devices, transceivers for control from popular RF devices and sensors and up to 16 PoE motors or it can be scaled for larger systems with other Reaktor, Tokamak, Collider, Stellarator or other compatible power & data distribution devices.



including 485 wired devices or 485



Technical Specifications:

- Input: 24-48V DC, 2A
- Front 16 Motor Outputs: RJ45 (568B) 48-56VDC
- Rear 14 Device Ports: 24V DC
- Material: Powder coated steel enclosure
- 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
 - Rear motor ports: Up to 100m per motor port.
STP with minimum 23AWG
 - Front device ports: Up to 75m per motor port.
UTP with minimum 23AWG
- Operating Temperature Range: Ambient temp.
- Shipping Weight: 16.1 lbs. [15.77kg]
- Indoor use only
- 10-YEAR Transferable Warranty

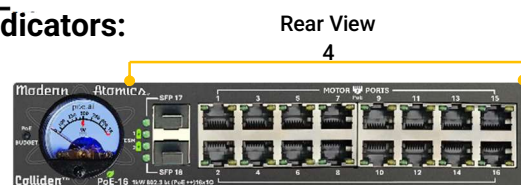
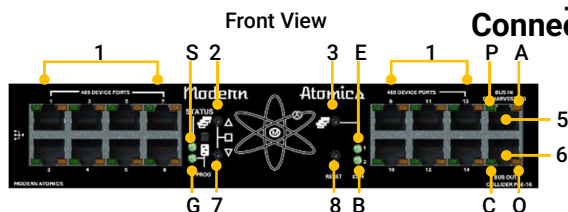


Features summary:

- NO NETWORKING KNOWLEDGE REQUIRED
- NO FANS, all 16 PoE ports can power up to 2Nm concurrently
- Enables control of up to Sixteen PoE motors per unit
- Motor control buttons allow for testing motors at Collider
- Device port auto-programming enables fast commissioning of any Somfy®, SILABS, Lutron®, or Bond 485 or RF device
- Any Somfy® RTS® motors can also be auto programmed
- 485 broadcast alias translation
- Compatible with Bond Bridge Pro and many other popular 3rd party control systems
- Built-in DHCP, LLDP Two 1G SFP
- ECO MODE enables removing all quiescent current
- Built-in Energy Storage Module (ESM-LiFePo4 phosphate)
- No Cobalt or any other conflict minerals
- Ships with Passive PoE Injector, Rack Ears, and Din brackets



Connections & Indicators:



ELEMENT	DESCRIPTION
1	Device Ports
2	UP / GROUP
3	ECO MODE
4	Motor Ports
5	485 BUS IN
6	485 BUS OUT
7	DN / GROUP
8	RESET

LED	INDICATORS	FUNCTION ON	FUNCTION OFF
S	STATUS	Mis-wire / Prog ER.	System good
E	ECO MODE	ECO Mode On	ECO Mode Off
P	POWER	Harvest Power On	Harvest Power Off
A	BUS Activity	Data	No Data
G	PROGRAM	Group Programing	Not in prog. mode
B	ESM	ESM Status	No ESM Power
C	RS-232	RS-232 Enabled	RS-232 not enabled
O	End of Line	End of bus	Not end of bus

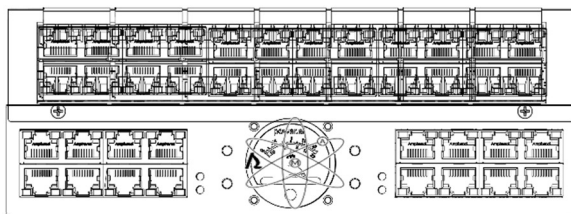


SHIPPING IN Q4 2025

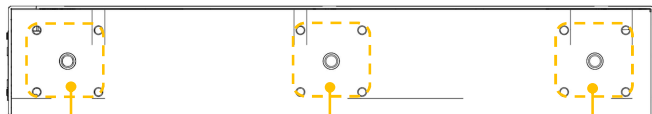
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8.51" [215.08mm]
REAR



SIDE X 2



Dimensions:

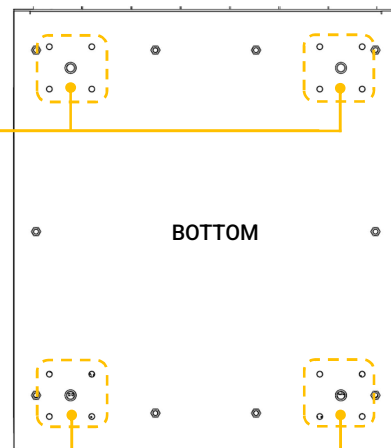
[43mm]
3.5"



802.3bt

14"

[248.10mm]

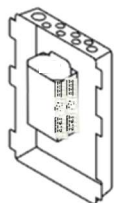


(16) Universal Mounting Points

Mounting Options:



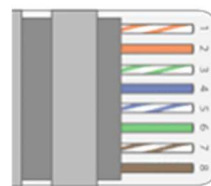
DIN RAIL



IN-WALL ENCLOSURE



Cable pinouts:



RJ45 USOC-8
TIA/EIA 568-B

TxRx A+ / DC +
TxRx A - / DC +
TxRx B+ / DC -
TxRx C+ / DC +
TxRx C - / DC +
TxRx B - / DC -
TxRx D+ / DC -
TxRx D - / DC -

REAR

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