Collider™ PoE-24

802.3bt PoE

#COL-PoE24

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 twenty-four 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's® range of PoE powered motors. The half-rack sized enclosure can be joined together to allow for up to 48 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, including 485 wired devices or 485 transceivers for control from popular RF devices and sensors and up to 24 PoE motors or it can be scaled for larger systems with other Reaktor, Tokamak, Collider, Stellarator or other compatible power & data distribution devices.

Technical Specifications:

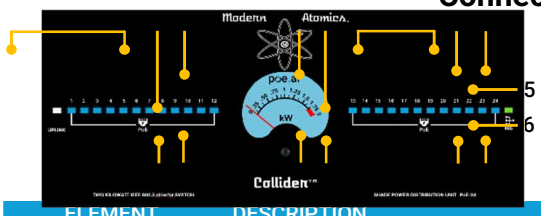
- Input: 24-48V DC, 2A
- Rear 24 Motor Outputs: RJ45 (568B) 48-56VDC
- Front 13 Device Ports: 12V DC
- Material: Powder coated steel enclosure
- Dimensions: (3.5 in. H) x (8.51 in. W) x (14 in. D)
  (4.3cm H) x (21.58cm W) x (24.81cm D)
- Maximum Wiring Distance
  - Rear motor ports: Up to 100m per motor 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: 26.1 lbs. [32.77kg]
- Indoor use only
- 10-YEAR Transferable Warranty

Features summary:

- NO NETWORKING KNOWLEDGE REQUIRED
- NO FANS, all 24 PoE ports can power up to 90W concurrently
- Enables control of up to twenty-four 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
- 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:

Front View



Rear View

	ELEMENT	DESCRIPTION
1	Device Ports	Connect 485 devices (up to 200' ea.)
2	UP / GROUP	Moves motor(s) up / Enter Group
3	ECO MODE	Enables/ Disables ECO Mode
4	Motor Ports	Connect 24 PoE motors
5	485 BUS IN	Bus input/Harvest input 24-48VDC
6	485 BUS OUT	Bus Output / RS-232
7	DN / GROUP	Moves motor(s) DN /Initialize device
8	RESET	Reset Groups / Factory 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 Q3 2025

Modern Atomics

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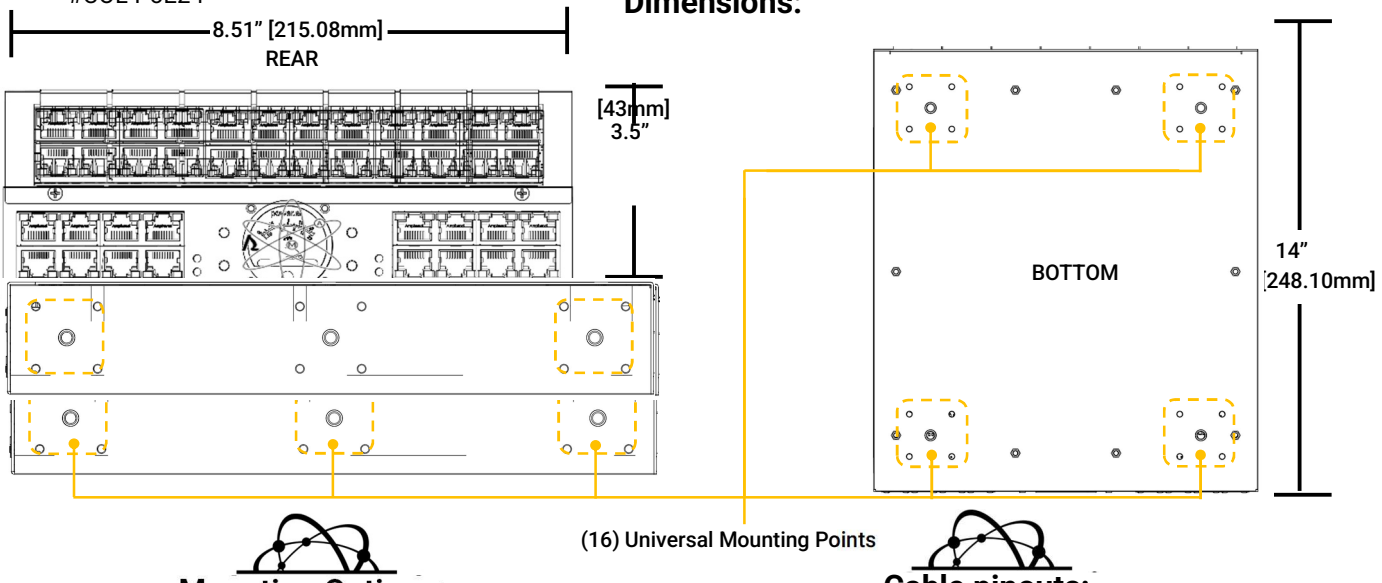
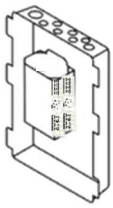
Dimensions:



Mounting Options:

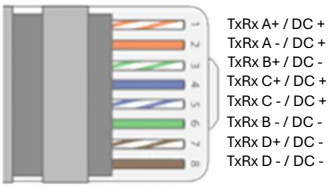
DIN RAIL



IN-WALL ENCLOSURE

REAR

Cable pinouts:



RJ45 USOC-8
TIA/EIA 568-B

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