

Neutron™ DC-22 PDU

RF / RS-485

Product Overview:



Neutron™ is a Patent-pending Plenum-rated Rack Mount, Din-Rail-Mount, or Wall-Mount low-voltage Power Distribution Unit & agnostic 485 four-port data hub with 22 motor ports and 2 non-powered BUS IN and BUS OUT ports for extending the 485-bus line to other PDUs, data hubs, or control system processors.

Neutron can work with any 24VDC low voltage motor from any brand using any communication type, 485-SubGHz-Zigbee-Matter-or any other type.

A built-in Ammeter can show the amount of quiescent current and max current draw from all motors.

Technical Specifications:

- Input: 24 ~ 48 VDC, .5A (BUS IN RJ45)
- Rear Motor Outputs: 24 VDC (8Nm)
- Front Motor Outputs: 24 VDC (1Nm)
- Device ports: 24VDC (4-RJ45)
- Material: Powder coated steel enclosure
- Dimensions: (1.75 in. H) x (8.51 in. W) x (10.5 in. D)
(44.5mm H) x (215.9mm W) x (254mm D)
- Maximum Wiring Distance
 - Rear motor ports: Up to 100m per motor port.
2, 4 or 5 position wire with 12AWG for power
 - Front PDU ports: Up to 50m per motor port.
UTP with minimum 23AWG
 - Front device ports: Up to 50m per device port
- Operating Temperature Range: 0~70°C (> 40°C de-rating)
- Shipping Weight: 8.5 lbs. [3.87kg]
- Indoor use only

PDU Options:

- Optional Voltmeter gauge orientation 12, 3, 6 or 9 o'clock
- Optional Wall-Mounted 16"x12"x4" enclosure with Lid
- Optional 5.08pitch screw down removable Terminal blocks
- Optional PDU vertical and horizontal joining

Features summary:

- Enables power for 22 ports
- Built-in 4-port 485 Data Hub
- Works with Many Popular Motors.
 - All Lutron® Low Voltage & RF Motors
 - All Somfy® 24v Low Voltage SDN®, RTS®, or Zigbee Motors
 - All **Q-Motion® Low Voltage Motors**
 - All Power Shades® Low Voltage Motors
 - All Crestron® Low Voltage Motors
- Certified IEC 62368-1 & CB 60950-1
- Meets USA EISA 2007
- Meets Energy Efficiency DOE Level VI
- Meets Code of Conduct Version 5 Tier 2
- Over Current Protection
- Over Temperature Protection
- Over Voltage Protection
- EN61000-4-2: Air discharge: ±15KV, contact discharge: ±8KV meet criterion A
- EN61000-4-3: 80~1000MHz,3V.m,80%AM(1kHz),meet criterion A
- EN61000-4-4: Impulse: ± 1kV applied to L,N,meet criterion A
- EN61000-4-5: ± 1kV applied differential mode,meet criterion A
- EN61000-4-6: 0.15~80MHz,3Vrms,80%AM(1kHz),meet criterion A
- EN61000-4-8: 50 Hz or 60 Hz, 1A.m, meet criterion A

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Connections & Indicators:

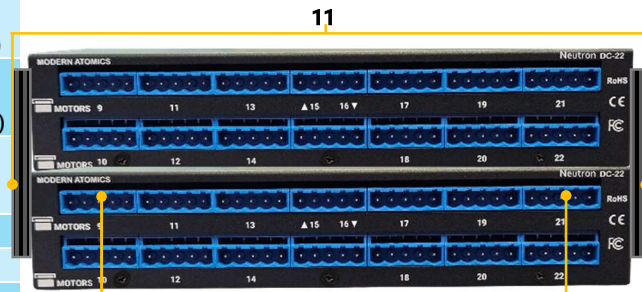
ELEMENT	DESCRIPTION
1	Ammeter Indicates current Amperage Output from [0~22] A @ 24VDC
2	DEVICE PORTS 4-485 Devices-Keypads/RF RCVERS
3	485 BUS IN PORT DC INPUT / System expansion & 3 rd Party Control Processor Port
4	FRONT 485 MOTOR PORTS 8-485 Motor Ports (2Nm max)
5	Meter Calibration Voltage Meter Calibration Control adjust with flathead screwdriver
6	RESET SWITCH Press to test or perform warm restart and Hold to Hibernate
7	ESM STATUS GREEN=Charged, Amber=Need Charge
8	485 BUS OUT PORT Non-powered / System expansion & 3 rd Party Control Processor Port
9	NFPA Plenum Rated Enclosure Can be mounted inside Air-Return spaces when using Plenum rated motor and data cables (Not included)
10	5.08 PITCH TERMINAL BLOCKS 5 Pos 14 Removable screw-down Motor Port Terminal Blocks for up to 12AWG wire & upto 100m(8Nm max)
11	NFPA Plenum Rated Enclosure Can be mounted inside Air-Return spaces when using Plenum rated motor and data cables (Not included)
12	5.08 PITCH TERMINAL BLOCKS 5 Pos 28 Removable screw-down Motor Port Terminal Blocks for up to 12AWG wire & up to 100m 8Nm max



FRONT VIEW



REAR VIEW

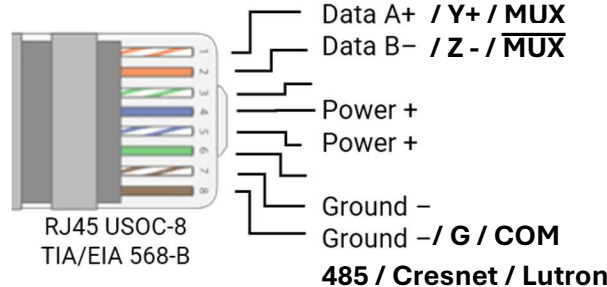
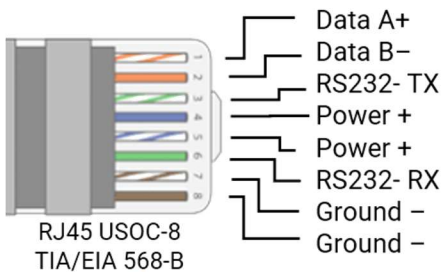


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Motor/Device Cable pinouts:

[2] BUS OUT - PORT

[3/7] BUS IN / MOTOR PORT



CONNECTOR OPTIONS

5 POSITIONS

SOMFY / 485

4 POSITIONS

LUTRON

4 POSITIONS

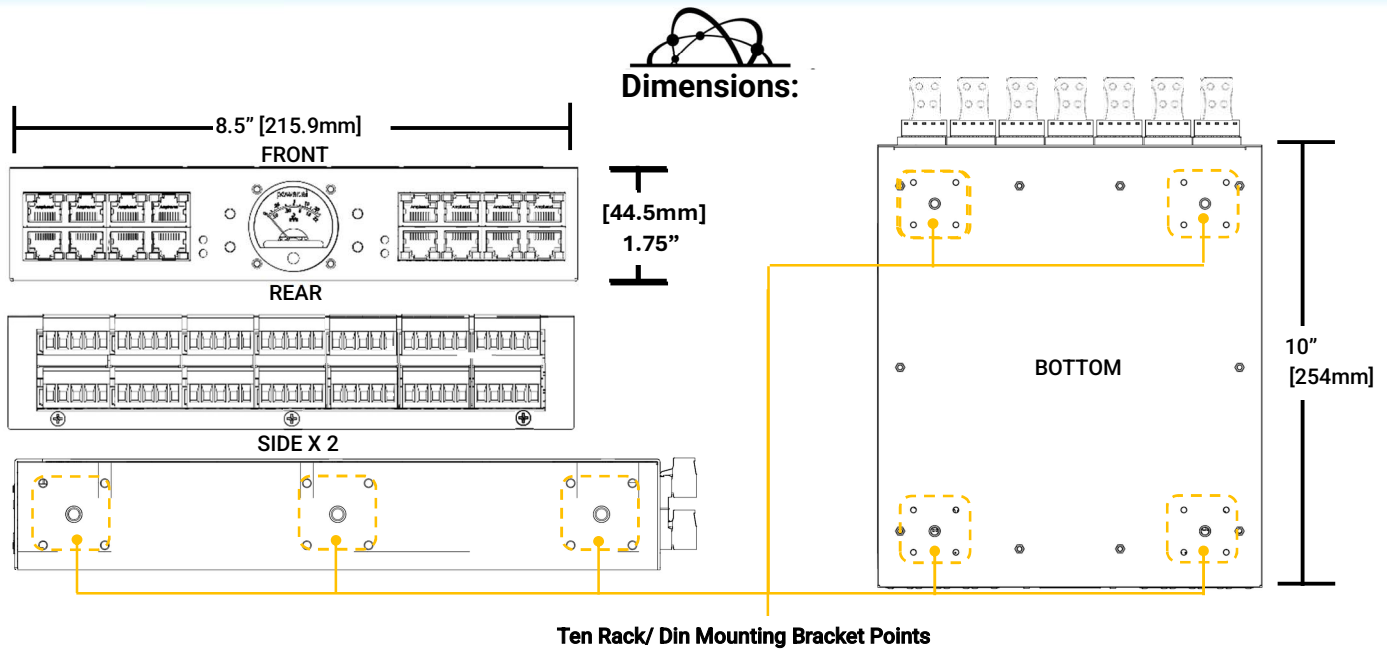
CRESTRON

2 POSITIONS

RF

Neutron™ DC-22 PDU

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Compatible Devices:

485 DEVICES:

Any Somfy® SDN® MOTOR

Any Somfy® RTS® MOTOR

Any Somfy® Zigbee MOTOR

Any Crestron® Motor

Any Lutron® Motor

Any BTX® Motor

Any Shade Innovations® or Shade Revolution™ motor

Modern Atomics Tokamak

Modern Atomics Limitator LM-1

Horizontal stack may require optional din rail kit

LONG and MID Rack Ears and 1RU JOINER KITS NOT INCLUDED & sold separately

Neutron is not a Lutron® or Crestron® approved power supply. Neutron does not qualify as a Somfy® Power Distribution Device for the Somfy® UL Listing as a Shade Operator.

Included in ALL Versions

(1) PDU

(14) 5.08 pitch Terminal Blocks

(15) 3" Wire ties (4 and 5 Pole only)

(1) Passive PoE Injector with AC Cable

FC Tested to Comply
With FCC Standards
FOR HOME OR OFFICE USE

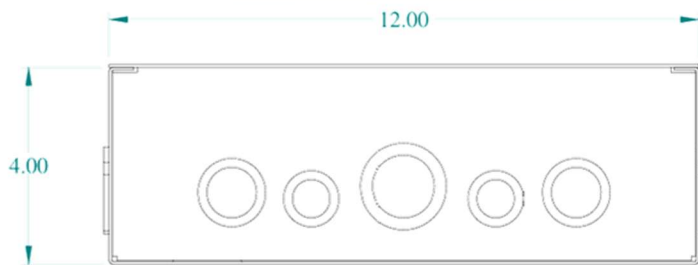


Specifications are subject to change without notice

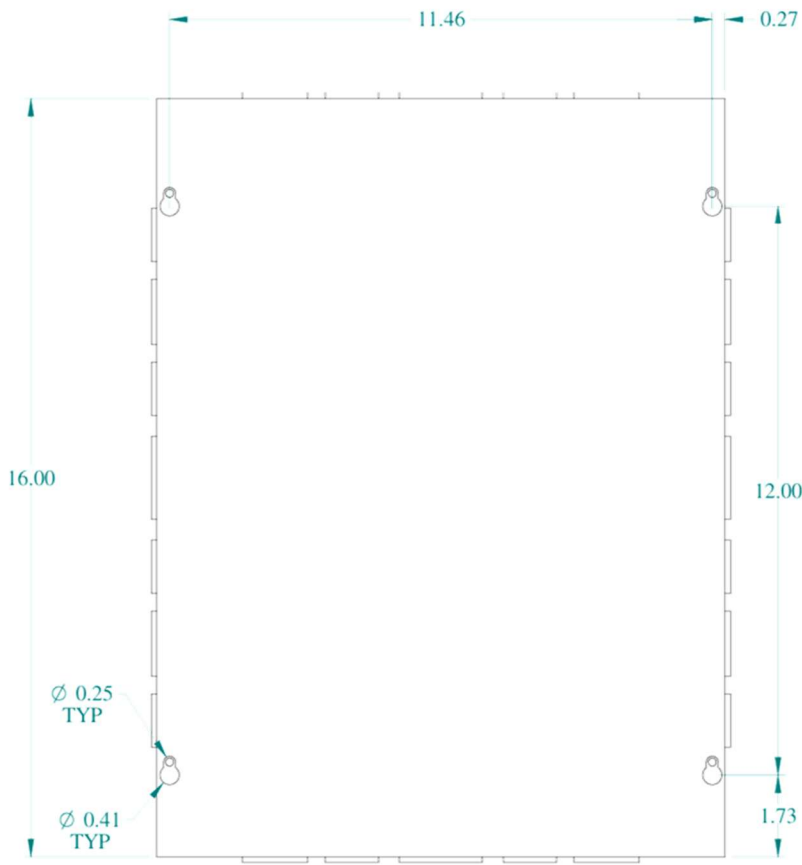
Neutron™

NEU-DC-22

Optional Enclosure Dimensions:

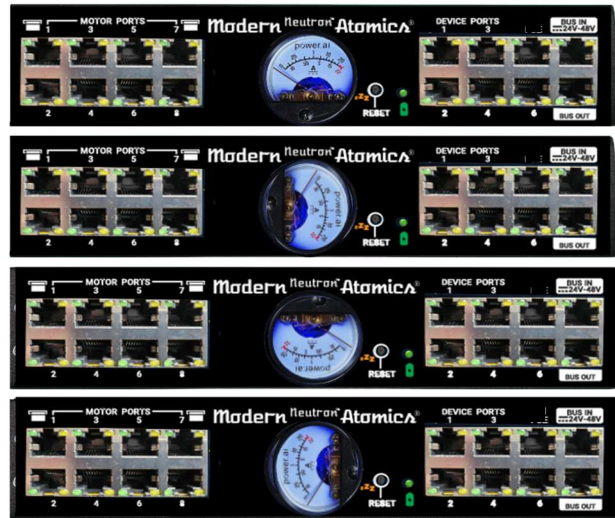


FRONT VIEW



TOP VIEW

OPTIONAL GAUGE ORIENTATION:



12 O'clock
DEFAULT

3 O'clock
OPTION

6 O'clock
OPTION

9 O'clock
OPTION

MODEL SKU OPTIONS:

PART NUMBER	MOTOR PORTS	TYPICAL MOTOR TYPE	TYPICAL BRANDS	VOLTAGE OPTIONS
NEU-DC-22	22	485/RF	Somfy® RTS® / Zigbee / Hunter Douglas® / BTX® / Power Shades® / Lutron® / Crestron® / Q- Motion®	24