

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)
- 14 Rear Motor Outputs; 24 VDC (8Nm)
- 8 Front Motor Outputs: 24 VDC (1Nm)
- 4 Device ports: 24VDC (4-RJ45)
- 1 Ethernet Port
- 1 GPI/O (Compatible with Automate keypads)
- 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
 - All Automate 485 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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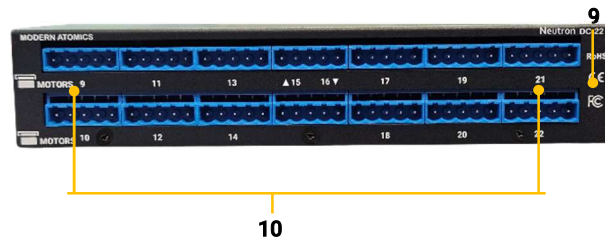


Connections & Indicators:

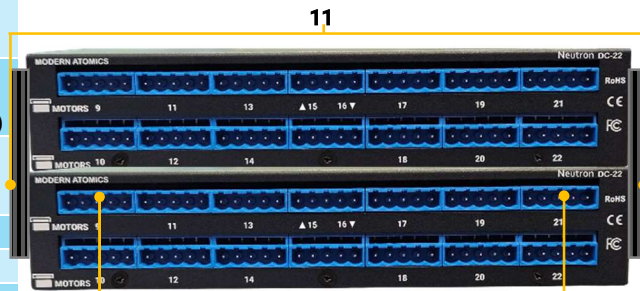
ELEMENT	DESCRIPTION
1	Ammeter Indicates current Amperage Output from [0~22] A @ 24VDC
2	DEVICE PORTS 4-485 Devices-Keypads/RF RCVERS
3	485 BUS IN PORT DC INPUT / System expansion & 3 rd Party Control Processor Port
4	FRONT 485 MOTOR PORTS 8-485 Motor Ports (2Nm max)
5	Meter Calibration Voltage Meter 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	5.08 PITCH TERMINAL BLOCKS 5 Pos 14 Removable screw-down Motor Port Terminal Blocks for up to 12AWG wire & upto 100m(8Nm max)
10	NFPA Plenum Rated Enclosure Can be mounted inside Air-Return spaces when using Plenum rated motor and data cables (Not included)
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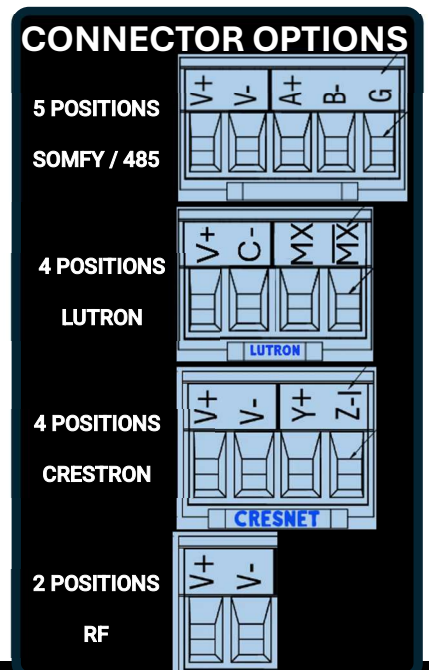
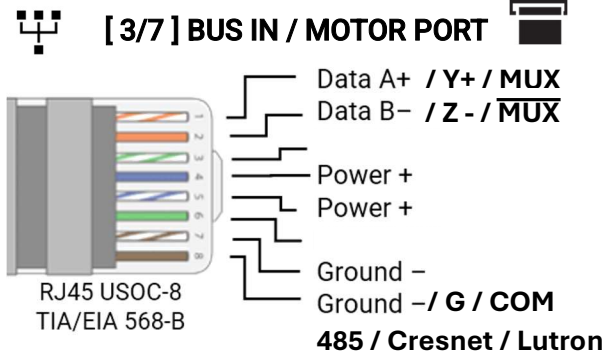
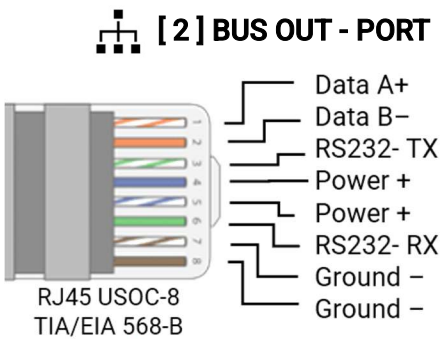
FRONT VIEW




REAR VIEW

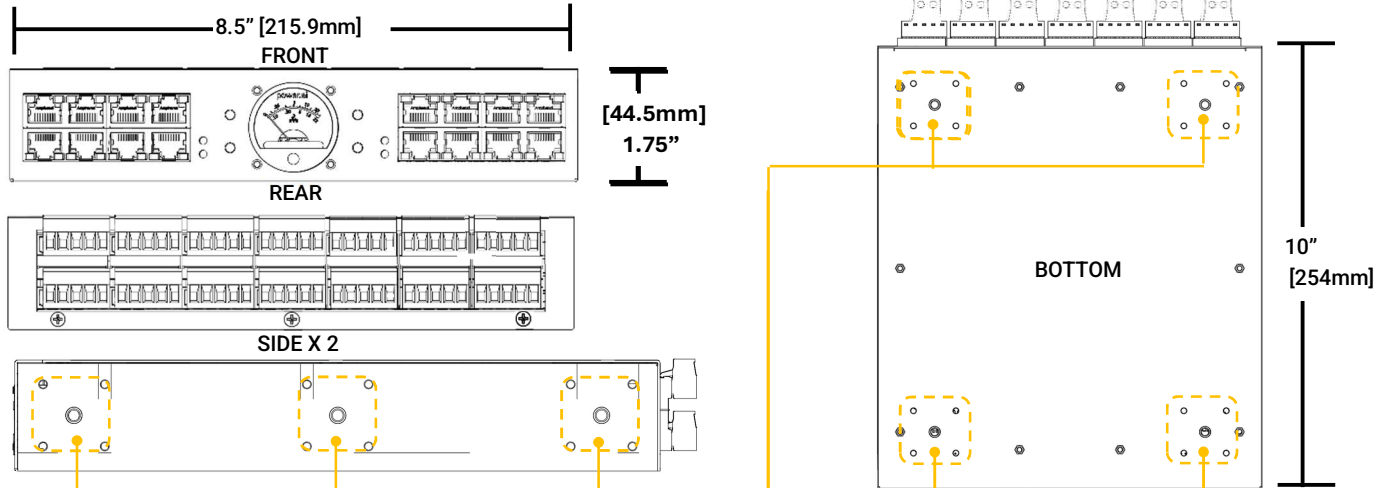


Motor/Device Cable pinouts:





Dimensions:




Ten Rack/ Din Mounting Bracket Points



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 Automate 485 Motor
 Modern Atomics Tokamak

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

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.

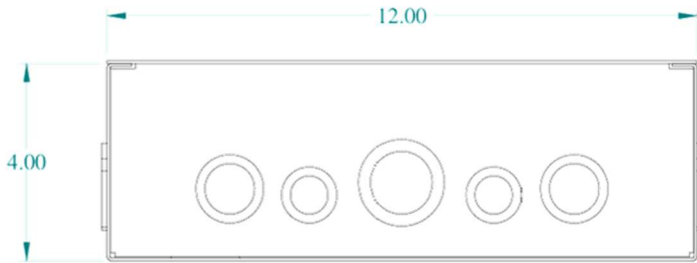


Specifications are subject to change without notice

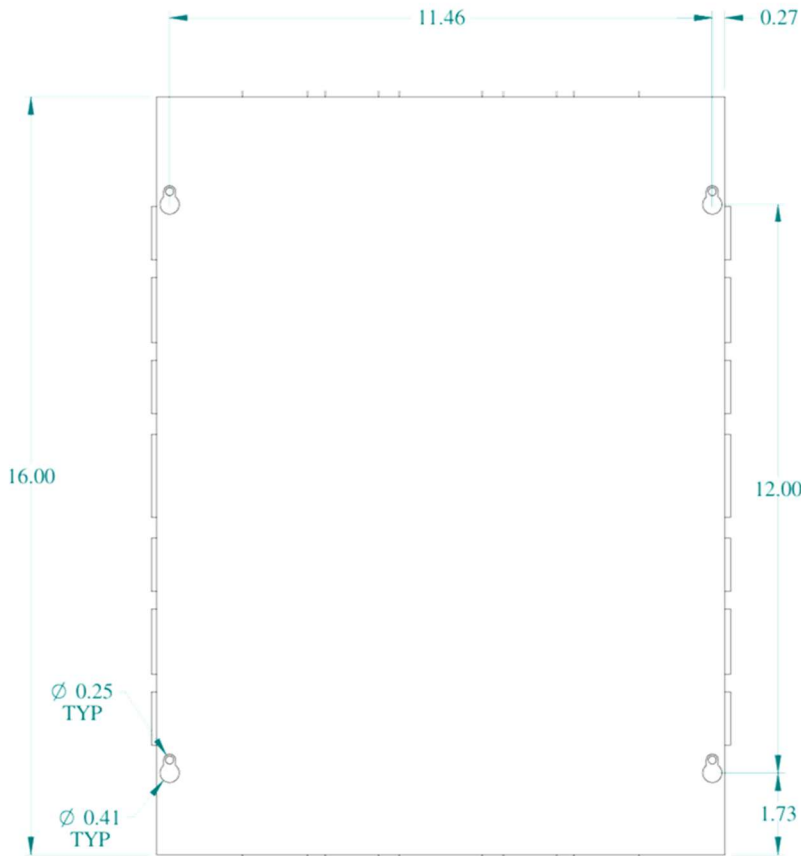
Neutron™



Optional Enclosure Dimensions:



FRONT VIEW

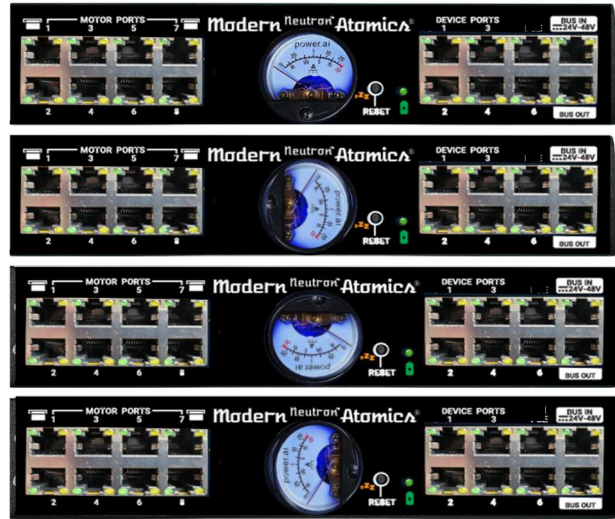


TOP VIEW

NEU-DC-22



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



CEDIA MEMBER

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www.ModernAtomica.com

23438 Texas Highway 35, Palacios, Texas 77465, United States

+1 (844) 771-8725