

Tokamak™ DC-20 Multi-Protocol/RS-485

TOK-DC-20

Product Overview:

Tokamak™ is a Plenum-Rated Rack-Mount, din mount, or wall-mount low-voltage power supply & 485 agnostic data hub with 20 motor ports and 16 device ports and BUS IN, and BUS OUT PORTS.

Tokamak™ can also be used to harvest energy for up to 16 Reactor's or Neutron PDU's

When used as an 20-shade power supply, each rear port can provide up to 8Nm motors. or can be stacked together inside a 20" wall box. The product can be used as a stand-alone solution in small 20-Shade systems or to harvest power for us to 346 shades via up to 16 Reaktor's or Neutron units. Grow your system by adding other Neutron, Reaktors, Stellarators, & Colliders or 485 data hubs for unlimited 485 node systems.



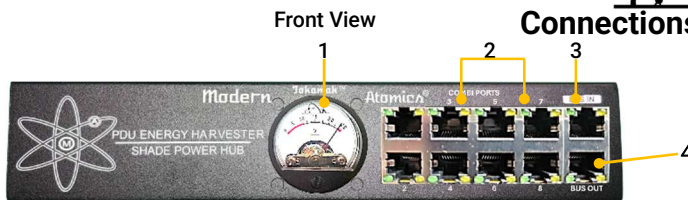
Technical Specifications:

- Input: 90 ~ 264 VAC, 1.2A (IEC-C14)
- Rear Motor Output: **12-24 VDC (8Nm)**
- Front Device/ PDU Harvest
- Rear mounted On/Off Power Switch
- Material: Powder coated steel enclosure
- Dimensions: (1.75 in. H) x (8.51 in. W) x (10.5 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.
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 75m per device port
- Operating Temperature Range: Ambient temp.
- Shipping Weight: 5.1 lbs. [2.17kg]
- Indoor use only
- 10-YEAR Transferable Warranty

Features summary:

- Enables power for up to 20 Low Voltage DC motors per unit (22A Max)
- Built-in 16-port 485 Data Hub
- Works with Many Popular Motors.
 - All Lutron® Low Voltage RF Motors
 - All Somfy® 24v Low Voltage RTS®, or Zigbee Motors
 - All **Q-Motion® Low Voltage Motors**
 - All Power Shades® Low Voltage Motors
 - All Nice® Low Voltage Motors
- Optional Voltmeters enables display of real-time power output
- 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

Connections & Indicators:



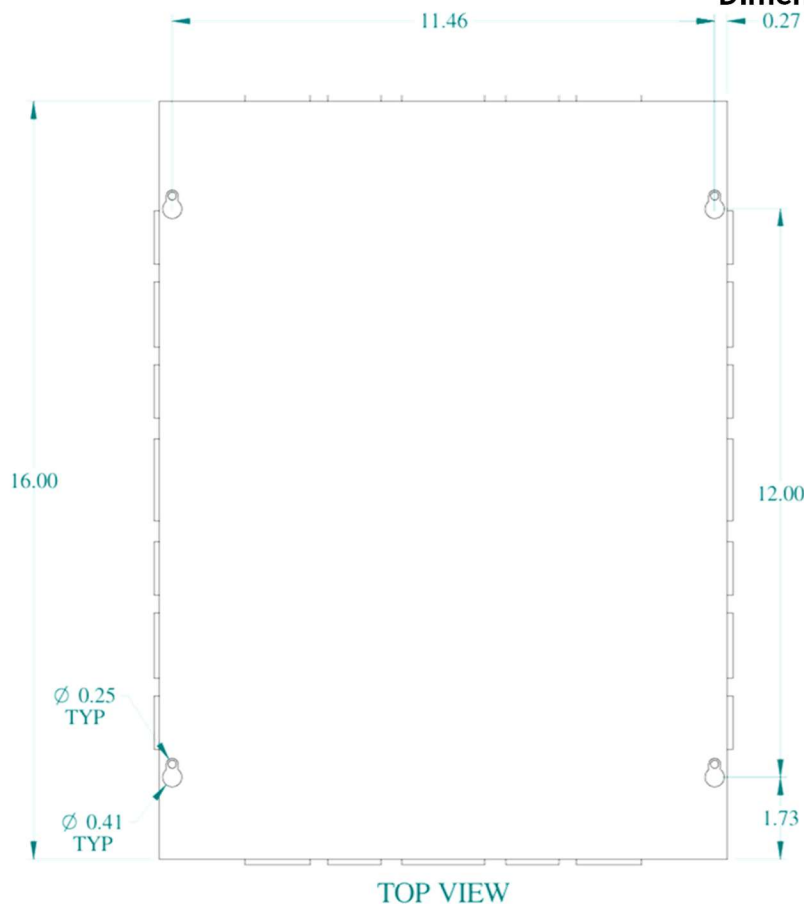
ELEMENT	DESCRIPTION
1	Voltmeter Indicates Output Power Voltage
2	COMBI PORTS Motor / Device / PDU Harvesting
3	BUS IN Non powered / System expansion
4	BUS OUT Non powered / System expansion
5	Motor Ports (10) DC motors max 8Nm per port
6	Power Switch Turns off all power outputs
7	IEC 14 Port AC Power Cable Included
8	Plenum Rated Enclosure
9	

Tokamak™ DC-20

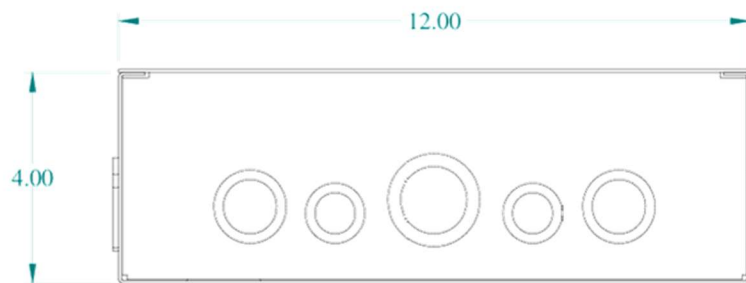
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Dimensions:



TOP VIEW

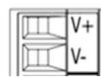


FRONT VIEW

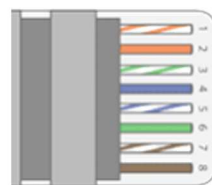


Motor/Device Cable pinouts:

5.08mm
Terminal Blocks



Power +
Power -



RJ45 USOC-8
TIA/EIA 568-B

Data A+
Data B-
Power +
Power +
Power +
Ground -
Ground -
Ground -



Compatible Devices:

485 DEVICES:

485 Decoflex® keypads (V2)

485 RF Receivers/Transceivers from Somfy® (V2 only) and SILABS®

485 CODECS / DATA HUBS from Somfy® and SILABS

RF DEVICES: Via RF Receivers/Transceivers from Somfy® (V2 only) and SILABS®

PDU HAVESTING:

Reaktor DC-22, and Bond Editions

Neutron DC-22, Collider PoE-24, and Stellarator AC-24

MOTORS:

Q-Motion Support

Most brands Low Voltage Horizontal stack may require optional din rail kit

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

OPTIONAL VOLTMETER

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Included in Box: (Standard Edition)

(1) Tokamak Enclosure with two PDU's

(20) 5.08 pitch Terminal Blocks

(30) 3" Wire ties

(2) 2m IEC AC Cable

SAFETY STANDARD APPROVAL



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Specifications are subject to change without notice