

Input Metered, Outlet Switched PDU Data Sheet - RackPower PDU

The RP2851 Input Metered, Outlet Switched PDU combines energy metering, power and environmental monitoring with remote outlet on/off switching to monitor, protect, and manage the rack environment. Utility grade metering at the phase input and internal circuit breaker levels provides comprehensive overload monitoring. Outlet power-up sequencing protects against inrush current overload and allows users to define equipment boot-up order and timing. While remote on/off control allows authorized users to power-cycle remote equipment and implement rack-level power access controls to power on/off each outlet. Advanced network management features allow for remote access and integration with accessories including environmental monitoring and security access solutions.

PDU Function	
Metering Attributes	Voltage(V), Current(A), Apparent Power(kVA), Real P Power Factor, Energy (kWh)
Metering Accuracy	± 1% to ISO/IEC 62052-21
Metering Locations	Input phase and circuit breaker level measurements
Remote Outlet Switching	Yes
Electrical Input	
Input Plug Type	NEMA L21-30P
Acceptable input voltage	100 - 120 / 200 - 240 VAC, Wye
Input current (phase)	30 A (24 A derated)
Input frequency	50/60 Hz
Max Input power	8.6 kVA
Electrical Output	
Output voltage	208 VAC
Maximum output current (phase)	30 A (24 A derated)
Overload protection (internal)	(3) 2-pole, 20 A, 5 kAIC, "temp stable, hy-mag type"
Outlet configuration	24 (C13/C15), 24 (4-in-1 Combo)
Physical	
Chassis Dimensions (L x W x D)	1780.0 × 56.0 × 75.0 mm (70.08 × 2.20 × 2.95 in)
Depth at circuit breaker	75 mm (2.95 in)
Input cord length	1.8 m (5.91')
Environmental	
Operating Temperature	-5 to 60°C (23 to 140°F)
Storage Temperature	-20 to 60°C (-4 to 140°F)
Humidity (operating/storage)	5-90% RH / 5-95% RH; non-condensing
Max operating elevation, above MSL	3,000 m (9,840 ft)
Compliance	
Safety & Environmental	IEC 62368 listed. RoHS, and REACH compliant. See

drawing for additional information.

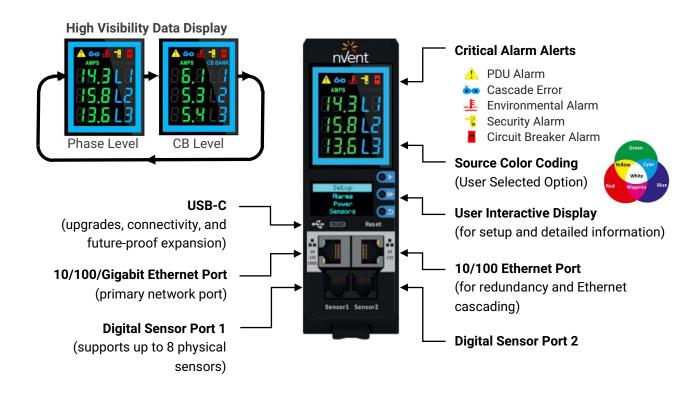


Advanced Network Management Module - RackPower PDU

Network Connectivity	
Network Connectivity	Dual ports: 1x Gigabit Ethernet (10/100/1000 Mbps) and 1x (10/100 Mbps) connection/IP address
Ethernet Cascading	Up to 64 units share a single "daisy-chain" Ethernet connection/IP address
DC Power Sharing	Each PDU can provide DC power sufficient to power network management electronics
Dual Ethernet Support	Dual Ethernet ports for redundant network communications
Dual Network Access	Dual network connectivity allows redundancy and/or multiple stakeholder connectivity
Remote Connectivity	HTTP(s), iP4V and iPV6, SSH, Virtual Serial, SNMP (v1, v2c, v3), JSON-RPC, LDAP(S),
WebUI Interface	Data efficient REACT framework with native mobile device support

Management Module Attributes

Microprocessor/Memory	Cortex A-5
Field Replacement	Hot swap replaceable module; fast plug-and-play connectivity
Module Orientation	Tool-less removal and 180° install capable for top or bottom power cord orientation
User Display	Dual Displays: large high visibility LED display for key metering information and alarms. Low-power graphical oLED with user controls for local information.
Display Language	English, Spanish, German, French, Italian, Korean, Japanese, Chinese (simplified)
Lighted Color Code	User programmable color border allows power source identification by PDU
Sensor & Supports	Supports up to 8 digital sensors for environmental sensors and/or electronic locks





Overcurrent Protection

Circuit Breaker Configuration

Circuit Breaker Type (3) 2-pole, 20 A, 5 kAIC, "temp stable, hy-mag type"

Circuit Interrupt Rating 5 kAIC

Circuit Breaker Trip Curve Sensata Trip Curve 62/Carling Trip Curve 24

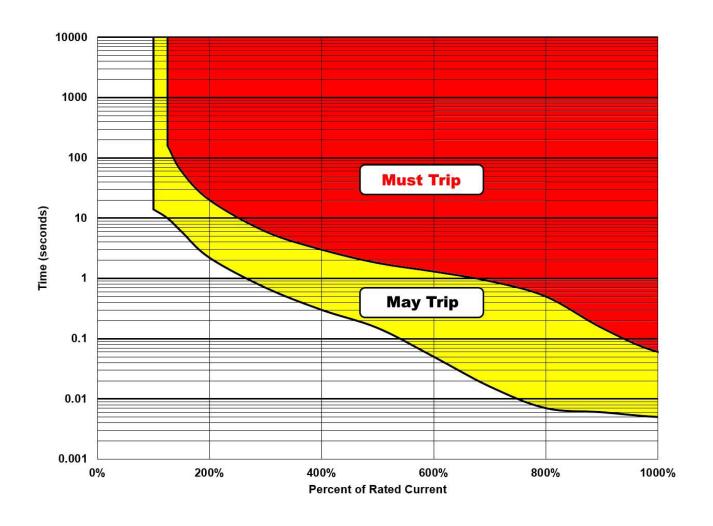
Inrush Pulse Tolerance 10 times rated current (approx.)

Dielectric Strength 3,750 VAC, 60Hz, 60 seconds between all electrically isolated terminals

Vibration Shall not trip when vibrated to MIL-STD-202, Method 204, Condition A, 100% load

Temperature Rating -40 to 85°C (-40 to 185°F) Ambient

Handle Off Guard Yes, protects against accidental user actuation to OFF position





EA9102	Single Temperature Probe
EA9103	Temperature and Humidity Combo Sensor
EA9105	3x Temperature and Humidity Combo Sensor
EA9106	Sensor Input Hub (3 sensors input to PDU)
EA9109	Magnetic Door Switch (open/close)
EA9110	Dry Contact Cable (for third party sensors)

EA9111 Spot Fluid Leak Sensor
EA9112 Rope Fluid Leak Sensor
EA9116 Smoke Alarm Sensor

Environmental Sensors and Security Access Control

EA9500 Security Access eHandle supports physical key entry + Electronics access + RFID

card reader + Keypad

EA9502 Security Access eHandle supports physical key entry + Electronics access + RFID

card reader

EN9550 eHandle Sensor, Temperature and Door Contact Combo Sensor

EN9551 eHandle Sensor, 3x Temperature and Door Contact Combo Sensor

Warranty and Terms

Warranty: nVent warranties RackPower brand equipment provided shall be free from manufacturing defects for a period of five (5) years from the invoice date to the original purchaser. For full warranty details, please visit https://enlogic.com/warranty.

Disclaimer: Copyright© 2023, nVent Electric plc and/or its affiliates. All rights reserved. This document is provided for information purposes only and current at the time of publishing; the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and

conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

North America All locations

Tel +1.800.525.4682

Europe

Germany
Tel +49.7082.794.0
France
Tel +33.388.90.64.90
Sweden, Norway,
Finland
Tel +46.8.683.61.00

UK, Ireland Tel +44.144.2218.768 **Poland** Tel +48.22.209.98.35

Italy Tel +39.02.932.714.1

Asia Pacific

VR China
Tel +86.21.2412.6943
Singapore
Tel +65.6768.5800
Japan
Tel +81.45.476.0271

Middle East & India

United Arab Emirates Tel +971.4.823.8666 India Tel +91.80.6715.8900 Turkey Tel +90.541.3680941



Our powerful portfolio of brands:

CADDY ERICO HOFFMAN