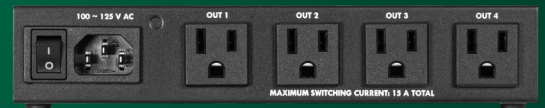# PowerPDU 4KB

∏ETIO

PowerPDU 4KB is a PDU (Power Distribution Unit) with 4 power outputs (4x NEMA 5-15R) controlled and metered over a LAN. Each output can be switched on/off/toggle individually over the web interface, NETIO Cloud service or the mobile app. Open API enables integration with 3rd party systems. PowerPDU 4KB supports electrical metering on each output individually (4 Channels). DI (Digital Input) is compatible with any dry contact (relay output) or NETIO temperature sensor.

- LAN (Ethernet)
- **Input**: IEC-320 C14 100-125V
- **Output**: 4x NEMA 5-15R sockets
- **Electrical metering:** 4 Channels

- **HTTPs supported,** Open API (10 protocols, M2M API)
- **Mobile app:** NETIO Mobile 2
- **Service:** NETIO Cloud

Each output can be switched On/Off remotely or based on DI, temperature sensor value etc.. Outputs can be switched ON in a sequence after a power-up or restoration by configuring a custom power-up delay interval for each output individually.

NETIO PowerPDU 4KB can be mounted in 19" rack cabinets – horizontally, vertically, or as a 1U device.

The **NETIO Mobile 2** app controls each output individually over LAN (local network) or NETIO Cloud.

NETIO Cloud is a SSL-secured service for controlling multiple devices from anywhere (Web or Cloud API).

Open API (such as HTTPs, XML/JSON over HTTP, SNMP, Modbus/TCP, MQTT-flex, Telnet and others...) enables integration with third party systems (controlling the outputs over the network).

DI (Digital Input) / Sensor is input for external NETIO T1 Sensor temperature probe / button (dry contact). Reaching temperature value / pushing the button can initiate action like power-off on defined output, toggle output etc. It's related to **CRxx (Condition & Rules)** features.

AV drivers make it easy to connect NETIO sockets to a professional Audio/Video control systems such as Utelogy, Crestron, Control4, RTI, Savant and more.

Electrical values on each one from 4 outputs (A, W, kWh, PowerFactor, ...)

UL Certification

TAA Compliance

**Remote switching on/off
or power-cycling of the electrical outputs**

Central web interface for controlling multiple devices

Controlled power-up: Outputs are switched on in a defined order with a delay

Drivers for AV systems and installations (Utelogy, Crestron, Control4, RTI, ELAN, SKAARHOJ…)

Energy savings - SOHO applications

FEATURES

- 4x NEMA 5-15R power output
- Each output can be switched on/off individually
- Methods for controlling each output:
  - WEB browser
  - Mobile app: NETIO Mobile 2 (iOS and Android)
  - NETIO Cloud
  - Scheduler
  - Watchdog (Power & Ping)
  - Rules & Conditions (based on DI / NETIO T1 Sensor)
  - Open API (10 protocols)

- **NETIO Mobile 2**: Mobile app
- **NETIO Cloud**: Service for controlling multiple devices

- **ZCS** (Zero Current Switching): The relay is switched when the current crosses zero. It reduces relay wear and allows switching devices with a high Inrush Current.
- **Temperature sensor**: External temperature Sensor T1 on 3m cable can be connected to DI.
- FW upgrade over the Web interface
- **The Scheduler function**: Time based switching

- **Open API (protocols)**
  - JSON over HTTP(s)
  - Modbus/TCP
  - MQTT-flex
  - Telnet
  - SNMP (SNMP v1/v3)
  - XML over http(s)
  - URL API – http get
  - HTTP Push JSON / XML

- Supported protocols: HTTP(s), DNS, NTP, uPNP, DHCP, ICMP, TCP/IP

SUPPORT FOR USERS AND DEVELOPERS

- NETIO Wiki – library for developers
- ANxx (Application Notes) with examples
- NETIO Drivers – for AV control systems

SPECIFICATIONS

POWER

- Power input: IEC-320 C14 (100-125V AC)
- Power output: 4x NEMA 5-15R, max 15A each (UL rating 12A)
- Each output: On/Off (relay SPST-NO)
- **ZCS** (Zero Currents Switching): Yes
- Internal consumption: 1-3 W
- **PowerUp State**: Default output state (On/Off/Last state)
- **PowerUp Delay**: Delay before switching output on

INTERFACES

- LAN 10/100 Mbps (RJ-45)
- 1x DI (Digital Input) with 12V DC (max 50mA)
- LED indicators in the RJ45 jack & M2M LED

ELECTRICAL MEASUREMENTS (4 individual outputs)

- Current [A]
- Consumption [Wh]
- Power [W]
- TPF (True Power Factor)
- Accuracy: <1%
- Phase [°]
- Frequency [Hz]
- Voltage [V]
- Reverse Energy [Wh]

PACKAGE CONTENTS

- NETIO PowerPDU 4KB
- QIG (printed Quick Installation Guide)
- Power cord NEMA 5-15P to C13 included

DIMENSIONS / WEIGHT

- PowerPDU 4KB: 8.66 x 1.57 x 4.72 mm / 1.65 lb
  (220 x 40 x 120 mm / 750 g)
- Package: 10.04 x 2.87 x 8.03 mm / 2.58 lb
  (255 x 73 x 204 mm / 1.17 kg)

OPERATING CONDITIONS

- Temperature -4 °F to 149 °F / 5A (-4 °F to 122 °F / 15A)
  (-20 °C to 65 °C /5A (-20 to 50 °C /15A))
- For indoor use only (IP30)

NORMS: UL 62368-1, CAN/CSA C22.2 No. 62368-1, FCC 47 CFR - Part 15 , ICES-003

NETIO PowerPDU	4KB	LAN PDU with 4 outputs NEMA 5-15, switching and metering. The power cord NEMA 5-15P to C13 is included.
NETIO PowerPDU	4KS nc	LAN PDU with 4 outputs IEC-320 C13, switching and metering. The power cord is not included.
NETIO PowerPDU	4KS US	LAN PDU with 4 outputs IEC-320 C13, switching and metering. The power cord NEMA 5-15 to C13 is included.
NETIO PowerPDU	4KV	LAN PDU with 4 outputs powerCON, switching and metering. The power cord is not included.