# PowerPDU 4C

PowerPDU 4C controls and measures four IEC-320 C13 power outlets. Communication takes place over 2 LAN ports (embedded Ethernet switch) and a serial port (RS-232). PowerPDU 4C measures power consumption (A, kWh, TPF, W, V, Hz) on each power outlet individually.

- 4x IEC-320 C13 power outlet (110/230V)
- 2x Ethernet (LAN / SWITCH)
- Consumption measurement for each outlet
- M2M API (13 protocols, open API)
- Scripting language (Lua)
- Serial port (RS-232)
- IP Watchdog (PING-based restart)
- Scheduler function (timer / calendar)
- ZCS (Zero Current Switching)

Each power output can be controlled from the device's Web interface, Mobile app, button or using various open M2M APIs (protocols : REST XML/JSON, Modbus/TCP, MQTT, SNMP v3, Telnet and more).

OUT 3

L SWITCHING CURRENT: 10

OUT 2

СОМ

L Rx Tx

OUT 4

Each C13 power output can be automatically switched on/off according to a time schedule, or by the IP WatchDog function that detects a PING response.

As a unique feature, the device is userprogrammable in the Lua language. The Lua script runs in PowerPDU 4C and reacts to time or other LAN devices (Lua Active Client).

Usage example: The custom Lua script can read data from the RS-232 serial port and switch additional AC unit based on the value from a connected temperature sensor. Controlling power to IT infrastructure (servers, KVM, routers)

- Controlled powering up of IT infrastructure
- O Autonomous restart of disconnected microwave links
- Industry integration with 3rd-party systems



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Energy savings



Multimedia installations

### **FEATURES**

- 4x power output: IEC-320 C13
- Socket control options:
- o Buttons
- WEB browser
- Mobile App
- M2M API (13 protocols)
- o Lua script
- Built-in LAN switch (2x RJ-45)
- ZCS (Zero Current Switching) recommended for electric appliances with high Inrush Current
- IOC (Independent Output Control) output state is not affected during FW upgrade.
- Scheduler function a smart calendar
- IP Watchdog function autonomous ping restarter
- M2M API (protocols)
  - Telnet (KSHELL)
- o REST JSON over HTTP(s)
- $\circ$  SNMP v1 + v3 • Modbus/TCP
- O URL API over HTTP
- O MQTT generic / MS Azure O SIP
- REST XML over HTTP(s)
- Supported protocols: HTTP, HTTPs, SMTP, DNS, NTP, uPNP, DHCP, SNMP, ICMP, Modbus/TCP
- RS-232 (3 pins) can be read and controlled in Lua scripts.



## LUA – custom scripts



PowerPDU 4C supports the Lua scripting language. Custom scripts to control individual outlets can be written over the WEB interface.

## SPECIFICATIONS

#### POWER

- Power input: IEC-320 C14 (110/230V AC) 10A
- Power output: 4x IEC-320 C13 / 10A
- Output: On/Off (relay SPST-NO, IOC)
- **ZCS** (Zero Current Switching): Yes
- Internal consumption: 2-5 W
- PowerUp state: On / Off / Last state

#### **INTERFACES**

- 2x LAN 10/100 Mbps (RJ-45 jack)
- Integrated Ethernet switch
- RS-232 (RxD, TxD, GND) terminal block
- 4x button for individual outputs
- LED indicators
- Main power switch

#### **ELECTRICAL MEASURMENTS**

- 4x Current [A]
- 4x Consumption [kWh]
- 4x Power [W]
- 4x TPF (True Power Factor)
- Frequency [Hz]
- Voltage [V]
- Accuracy: <1% (25°C)</li>

#### **PACKAGE CONTENTS**

- NETIO PowerPDU 4C
- QIG (printed Quick Installation Guide)
- Europlug C13 power cabel

#### **DIMENSIONS / WEIGHT**

- PowerPDU 4C: 220 x 40 x 120 mm / 0.8 kg
- Package: 325 x 74 x 224 mm / 1.15 kg

#### **OPERATING CONDITIONS**

- Temperature -20 °C to 75 °C
- EN 61010-1 ed.2:2011
- For indoor use only (IP30)

- EN 61326-1 ed.2:2013
- EN 55011 ed.3:2010

NETIO PowerPDU 4C	LAN PDU with 4 power outputs energy measurment and control, serial port and custom Lua scripts.
NETIO RM1 4C	A 19" 1U rackmount bracket for 1 unit of NETIO PowerPDU 4C.
NETIO RM2 2X4C	A 19" 1U rackmount bracket for 2 units of NETIO PowerPDU 4C. 2 pieces of PowerPDU 4C required.
NETIO RM3 4C VERTICAL	Mounting kit for l unit of NETIO PowerPDU 4C. Can be mounted inside a 19" rack on the sides (vertical) or inside the rack.
NETIO RM4 4C UNIVERSAL	Universal mounting kit for 1 unit of NETIO PowerPDU 4C. Can be used inside metal cabinets.

LAN

ΑΡΙ

o REST URL API - HTTP(s) get