

xPoE-6-11-OF

6 ports PoE switch - built-in unit

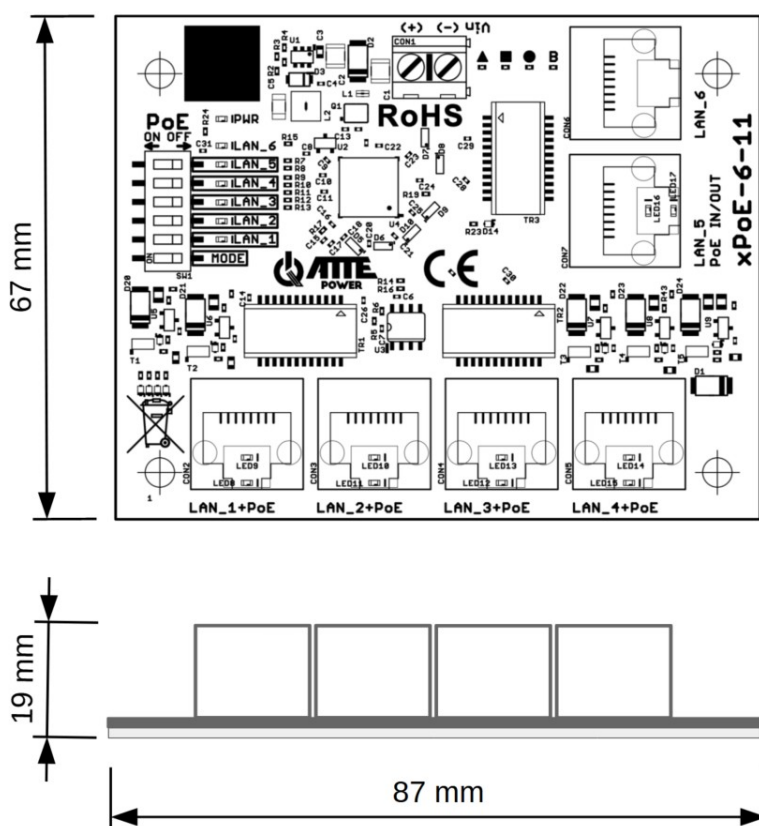
10/100Mbps 5xPoE + 1xUplink

INSTRUCTION MANUAL

xPoE-6-11-OF is an unmanaged PoE switch dedicated for powering IP CCTV cameras. The device is designed to work with IP cameras and other network devices operating in the PoE 802.3 at/af and PoE PASSIVE standard.

Electronic protection of PoE outputs ensures safe operation at short-circuit or overload of individual power supply branches and automatic voltage recovery after removing the failure. The LONG RANGE mode allows to increase the transmission range up to 280 m over a single UTP cat5 cable with no additional signal boosters required.

The open frame (OF) construction allows the device to be installed in any suitable third party housing. It is highly recommended however to use our dedicated ABOX series enclosures that come with a pre-drilled backplate (4,8mm diameter, pitch 10,8mm) allowing both horizontal and vertical installation.



General view of the device

Technical Specification

LAN Ports	6 RJ45 ports 10/100Mbps (auto MDI-MDIX, auto-negotiation) 5 x PoE, 1 x UPLINK
Ports Functions	LAN 1 ... LAN 4: PoE IN (switch power supply) - PASSIVE (up to 40W) PoE OUT (to PoE powered devices) - PASSIVE (up to 40W), 802.3af (up to 15,4W), 802.3at (up to 30W) PoE PINOUT - 4,5 (V+) 7,8 (V-) LAN 5: PoE IN (switch power supply) - PASSIVE (up to 70W) PoE OUT (to PoE powered devices) - PASSIVE (up to 70W), 802.3af (up to 15,4W), 802.3at (up to 30W) PoE PINOUT - 4,5 (V+) 7,8 (V-) LAN6: UPLINK - data only, PoE unavailable CON1 Vin (-) (+): DC IN (use only if it's NOT powered from PoE ports) - up to 4 A (220W @55V) DC OUT (when powered from PoE ports) - up to 1,25A (when powered from LAN 5)
Operating modes	"STANDARD" (DIP Switch MODE = OFF) LAN 1 ... LAN 6 - 10/100Mbps, up to 100m range "LONG RANGE" (DIP Switch MODE = ON) LAN 1 ... LAN 4 - 10Mbps, up to 280m range LAN 5 ... LAN 6 - 10/100Mbps, up to 100m range
Power Supply Voltage	10 ... 56 VDC
Output Voltage	Vout = Vin
Ports Protection	Caution! For 802.3at/af PoE Powered Devices Vin > 44VDC LAN 1 ... LAN 6, Vin Surge protection LAN 1...LAN 4 0,75A overload protection with auto recovery LAN 5 1,25A overload protection with auto recovery
Indication	LED PWR (white) - DC input voltage indicator LAN 1 ... LAN 5 RJ45 RED LED Backlight PoE – PoE voltage presence LED LAN 1 ... LAN 6 (green) - link and data transmission "PoE ON/OFF" DIP switch - position 2 ... 6 (LAN 1 ... LAN 5)
Power Control	PoE OFF - DIP switch position OFF, LED RJ45 backlight disabled PoE ON – DIP switch position ON, LED RJ45 backlight enabled
Housing Construction	Open Frame module
Assembly	Snap-on spacers, mounting holes in 10.8 mm pitch
Operating Temperature	-25 ... +65°C
Dimensions	87 x 68 x 19 mm
Weight	0,05 kg

The Long Range mode allows you to increase the transmission range in the LAN network up to 280m with the use of a standard UTP twisted-pair cable.

The switch allows to work in two modes: standard and extended range. When the Long Range switch is in the OFF position, all ports operate at 100 Mbps and offer Ethernet coverage up to 100 meters. After switching the dipswitch to the ON position, the range is increased to 280 meters, and the speed on ports 1 to 4 is reduced to 10 Mbps. The bandwidth is sufficient to efficiently support one camera. In both modes, the speed UpLink 5 and 6 ports is 100 Mbps.

Thanks to the enabled LongRange mode, we provide greater flexibility in the placement of cameras. Increasing the distance from the switch allows easier coverage of a large area without the need to build additional distribution points.

"STANDARD" (MODE = OFF)

LAN 1 ... LAN 4 - 10/100 Mbps PoE OUT, range up to 100m

LAN 5 - 10/100 Mbps, PoE IN/OUT range up to 100m

LAN 6 - 10/100 Mbps, range up to 100m

"LONG RANGE" (MODE = ON)

LAN 1 ... LAN 4 - 10 Mbps PoE OUT, range up to 280m

LAN 5 - 10/100 Mbps, PoE IN/OUT range up to 100m

LAN 6 - 10/100 Mbps, range up to 100m

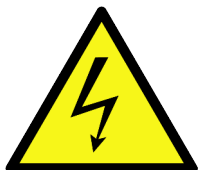
Comments:

- LongRange mode is turned off by default
- Changing modes requires power restart
- It is recommended to pre-test the features before deployment.
- There is no VLAN port isolation - uninterrupted communication between all switch ports regardless of the operating mode.
- In the case of long distances, we recommend powering the switch with 55V from the dedicated APS-90-550-OF power supply or using the ASUC-100-550-OF converter in the case of buffer sets
- Transmission distance is related to the cable used, Cat5e / 6 cable is recommended
- Using low-quality or CCA cables directly reduces the range and the limited PoE budget provided to the camera

Safety Precautions

- The installation and wiring must be performed by a competent engineer. For permanently connected equipment, a readily accessible disconnect device must be incorporated in the fixed wiring. The device must be connected to the mains supply 230 VAC 50 Hz via a specified fused connection outlet.
- Despite the fact that the enclosure of the device has a high degree of protection, it is recommended that the device should be mounted in places protected from direct influence of atmospheric factors, in particular against rain and direct sunlight.
- Since the power supply does not have a switch to isolate the mains supply, the installer is responsible for notifying the user of the means of isolating the mains supply from the device.
- When replacing fuses, use original or compatible types. The exact parameters of the fuses can be found on the inside of the device cover.

WARNING



Before installation and during maintenance make sure that the mains voltage 230VAC is disconnected

Installation

- Mount the device in the selected location and connect the connecting wires.
- Using the SW1 switch, turn off the PoE power on the ports intended for communication with non PoE devices (eg a PC).
- Connect the power supply of the switch to:
 - LAN5 - when the switch is powered PoE line
 - Vin, GND - when the switch is powered from terminal CON1
- Activate the main power supply so as to power the switch.
- LED PWR and LEDs in RJ-45 sockets where PoE power is switched on should light.
- Connect UTP cables leading to IP cameras (LAN 1 ... LAN 5) and VCR (LAN 6).
- Check the operation of all PoE devices connected to the switch.

Operation Indication

- LED PWR WHITE - presence of main power supply
- LED RED in LAN 1 ... LAN 5 connectors - presence of PoE power at specified port
- LED GREEN in LAN 1 ... LAN 5 connectors - transmission at specified port

WEEE MARKING



This symbol on the product or on its packaging indicates that the product must not be disposed of with normal household waste. Instead such equipment must be disposed of by arranging to return it to a designated collection point for the recycling of waste electrical and electronic equipment.

