# Power over LAN
## Midspans & Active Splitters

*Network video from anywhere...*
*without the need for power outlets!*

If you're looking for a simpler and quicker way to install and relocate your network surveillance cameras – without the services of an electrician - you need look no further than Power over LAN Midspans and Active Splitters from Axis.

By utilizing the wires that normally go unused in standard "Cat 5" network cables, Power over LAN Midspan and Active Splitter products feed power directly to Axis network video products over distances of up to 328ft/100m.

What's more, by connecting LAN Midspans to uninterrupted power supplies devices, your network surveillance system will even continue to operate in the event of a power failure - making it the perfect solution for powering mission-critical systems.

The active splitters enable Axis network video products that lack built-in support for Power over Ethernet to receive both power and data from a network connection.

- Compatible with most Axis network cameras and video server products
- Fully compliant to 802.3af*
- Facilitates remote monitoring and surveillance in places where there are no power outlets
- Convenient and cost-effective alternative to installing new power outlets and power cabling for video applications
- Surveillance cameras can now be installed quickly and easily by IT staff and/or system resellers

**Excluding the 12 V Active Splitter*

AXIS COMMUNICATIONS
Make your network smarter

# Power over LAN Midspans & Active Splitters

23737/EN/R1/0501

## Specifications Power over LAN Midspans

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| **Function** | Deploying Power over LAN in conjunction with a central UPS distributes back-up power and ensures uninterrupted operation of network surveillance cameras during electrical power failures. |
| **Data rate** | 10/100 Mbps |
| **Number of ports** | 1,6 or 12 |
| **Connectors** | *1 port Midspan:* 1 shielded RJ-45 Data connector and 1 shielded RJ-45 output connector for the combined data and power, TIA/EIA 568 Category 5<br>*6 and 12 port Midspans:* Shielded RJ-45, EIA 568A and EIA 568B, DB-9, Female (Management) |
| **Scalability** | Multiple Midspans can be mounted in a wiring cabinet to support additional terminals, resulting in a simple, cost effective method for expanding the network, as requirements evolve |
| **Wiring** | Midspans directly transfer data transmissions originating from Ethernet terminals over pairs 1/2 and 3/6. It acts as a normal patch panel for Ethernet connections, ensuring continuous and reliable performance. Power is provided only over unused Ethernet pairs 4/5 and 7/8 |
| **Remote power feeding** | Powers network video products up to 100m (328 ft) by utilizing existing Ethernet or fast Ethernet (category 5 unshielded or shielded twisted-pair cabling) for power transfer |
| **Power over LAN output specification** | Pin assignment and polarity: 4/5 (RTN.), 7/8 (-V)<br>Output power voltage: -48 V<br>User port power: 15.4 W minimum<br>Aggregate power: *1 port Midspan:* 23 W, *6 port Midspan:* 100 W, *12 port Midspan:* 200 W |
| Input power requirements | *1 port Midspan:*<br>AC input voltage: 90 - 264 V AC<br>AC Frequency: 47 - 63 Hz<br>AC input current: 0.5 A at 110 V AC, 60 Hz; 240 V AC, 50 Hz<br>*6 and 12 port Midspans:*<br>AC input voltage: 88 - 264 V AC<br>AC Frequency: 47 - 68 Hz<br>AC input current: 3.5 A at 110 V AC, 1.8 A at 240 V AC<br>DC input current: 10 A at 48 V<br>Volt ampere rating: 0.48 KVA (-48 V), 0.30 KVA (110 V AC) |

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| **Installation and management** | Plug-and-play installation. Midspans automatically detect all Power over LAN Ethernet terminals and supply inline power.<br>Local LED management display |
| **Auto-sensing algorithm** | Standard IEEE802.3af auto-sensing algorithm, backward compatibility to the pre-standard algorithm. This mechanism automatically detects power-ready terminals and supplies inline power. The per-port ensures continuous proper operation of devices (e.g. Network Interface Cards (NICs) that do no expect power on their Ethernet connection |
| **Display and indicators** | All port interfaces are located on the front panel for easy access and real-time network monitoring.<br>Bi-color LED, per port, indicating normal, overload or short-circuit conditions.<br>System indicators: AC power, User indicator - Channel power, Internal self-test monitoring LED,<br>*6 and 12 port Midspans only:* DC power |
| **Compliance** | IEEE802.3 standard (when no inline power is supplied) and IEEE802.3af, DTE Power via Media Dependent Interface (MDI) |
| **Mounting** | *1 port Midspan:* Wall or shelf mounting<br>*6 and 12 port Midspans:* Prepared for 19", 1U rack installation |
| **Approvals** | CE compliance<br>FCC Part 15 Class B. EN55022 Class B (Emission), EN50082-1 (Immunity)<br>Safety: UL 1950, CSA C22.2 No. 950, EN 60950<br>*1 port Midspan:* FCC Part 15 Class B with FTP cabling, (Class A with UTP cabling), EN55022 (CISPR 22) Class B with FTP cabling, (Class A with UTP cabling), Safety: GS EN 60950<br>*6 and 12 port Midspans:* TUV EN 60950 |
| **Operating conditions** | 0 - 40°C (32 – 104 °F)<br>*1 port Midspan:* Humidity max 93%, non-condensing<br>*6 and 12 port Midspans:* Humidity max 90%, non-condensing |
| **Thermal rating** | *6 and 12 port Midspans:* 285 BTU |
| **Dimensions (HxWxD) and weight** | *1 port Midspan:* 44 x 110 x 140 mm (1.75" x 4.17" x 5.5"), 450 g (1 lbs)<br>*6 and 12 port Midspans:* 44 x 433 x 302 mm (1.75" x 17" x 11.9"), 4 kg (8.8 lbs) |

## Specifications Power over LAN Active Splitter

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| **Function** | The Active Splitter separates the DC voltage and the Ethernet data, into two separate outputs terminating at a power port and a RJ-45 jack. |
| **Connectors** | *12 V unit:* Shielded RJ-45, EIA 568A and EIA 568B Circular connector type HRS RP34<br>*18 V unit:* Shielded RJ-45 |
| **Power** | Input 48 V nominal<br>*12 V unit:* Output 12 V, 0.9 A<br>*18 V unit:* Output 18 V, 0.38 A |
| **Compliance** | *18 V unit:* IEEE802.3af |
| **Installation** | Connects directly to the camera |

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| **Approvals** | *12 V unit:* EMCCISPR22 Class B, EN55022 Class B (Emission), EN50082-1 (Immunity), 89/336/EEC, EMC Directive including CE Mark, FCC Part 15 Class B. Canadian CSA C22.2, Class B Safety: IEC 950, CB Certified, 73/23/LVD, CE Mark, EN60950, TUV EN60950, AUL 1950. Canadian CSA C22.2, No. 950<br>*18 V unit:* FCC CFR47 Part 15B (Class B for FTP cables Class A for UTP cables), EN 55022 (Class B for FTP cables Class A for UTP cables)<br>Safety: UL60950:2000 EN60950/IEC 950, GS Mark |
| **Operating conditions** | *12 V unit:* 0 - 40 °C (32 – 104 °F)<br>Humidity max 90%, non-condensing<br>*18 V unit:* -20 - 55°C (32 – 104 °F)<br>Humidity max 93%, non-condensing |
| **Dimensions (HxWxD) and weight** | *12 V unit:* 32 x 127 x 76.2 mm (1.26" x 5" x 3"), 175 g (5.6 oz)<br>*18 V unit:* 33 x 75 x 120 mm (1.26" x 3" x 4.8"), 220 g (7.1 oz) |

*For product configurations, please refer to http://www.axis.com/products/pol/list.htm*

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