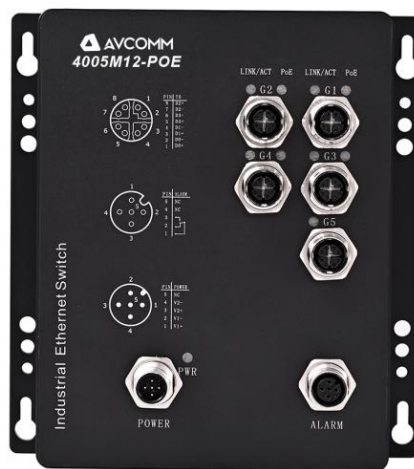




4005M12-POE Datasheet

Aiming to create better and safer working environments and life experiences through the products we deliver.



POE+



AVCOMM Technologies, Inc

www.avcomm.us

Email: info@avcomm.us

Phone: (713) 933-4534

Address: 333 West Loop North, Suite 460
Houston, TX 77024
United States

High-Performance **IP67** Gigabit PoE Ethernet Switches Designed for Extreme Environments

The 4005M12-PoE series M12 unmanaged railway Gigabit PoE Ethernet switches are engineered for high performance and durability, featuring an IP67 protection rating for superior resistance in harsh environments. These switches are capable of operating in extreme temperatures from -40 to 75°C and maintain stability in electromagnetically complex conditions. Designed to support Power over Ethernet (PoE) and Gigabit speeds, they are perfectly suited not only for automotive Passenger Information Systems (PIS), CCTV, and vehicle security monitoring, but also for maritime applications and smart factory settings. Complying with FCC, CE, and RoHS standards, the 4005M12-PoE series offers a reliable and rapid Ethernet connection solution, ensuring enhanced functionality and robustness in critical industrial and maritime environments.



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Features & Benefits

- Unmanaged Operation
- IP67 Rated Hardened Metal Enclosure
- Up to 16K MAC addresses for advanced network complexity
- Five 10/100/1000M M12 gigabit ports.
- Four M12 PoE ports, 15.4W/30W output power per port
- Auto Sensing Speed and Flow Control
- Redundant dual 48 VDC power inputs.
- Built-in overcurrent and reverse protection
- Support one-way relay alarm function.
- -40 to 75°C operating temperature range. .
- EN50155 for Railway applications



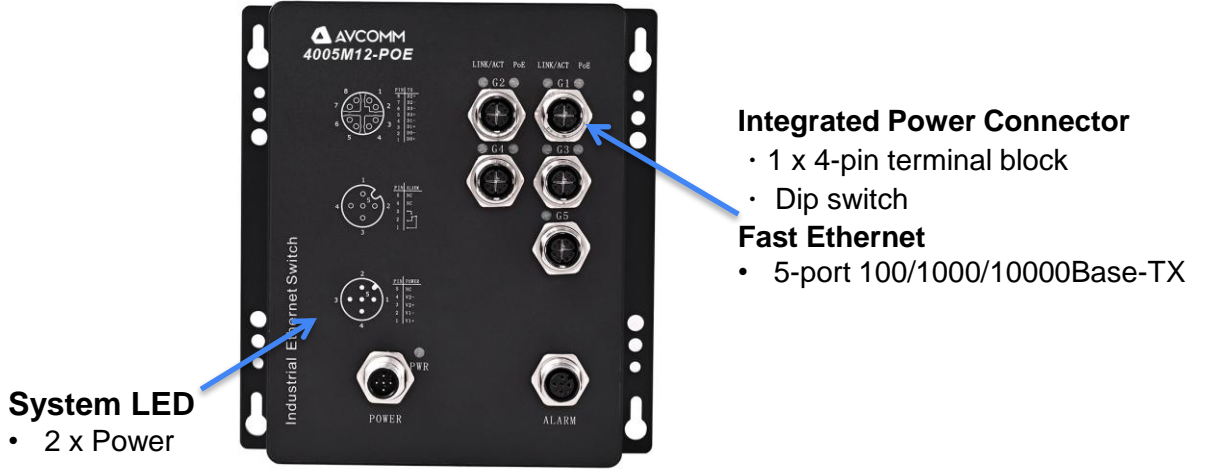
Order Information

Model Name	Description
4005M12-PoE	5 x 10/100/1000M M12 gigabit ports, -40 to 75°C operating temperature range, IP Rating up to IP67. Up to 4 x M12 PoE ports, 15.4W/30W output power per PoE port

 Specifications

Technology	
Standard	IEEE 802.3af for 15.4W Power-over-Ethernet, IEEE 802.3at for 30W Power-over-Ethernet, IEEE 802.3 for 10BaseT, IEEE 802.3u for 100BaseT(X), IEEE 802.3ab for 1000BaseT(X), IEEE 802.3x for Flow Control, IEEE 802.3az for Energy-Efficient Ethernet, IEEE 802.3x Flow Control, Back Pressure Flow Control
Performance	
Switch Technology	Store and Forwarding Technology with non-blocking
Number of MAC Address	16K
Jumbo Frames	10KB
Packet Buffer Memory	2 Mbit
Backplane bandwidth	22 Gbps
Forwarding rate	11.904 Mpps
Interface	
Ethernet Port	10/100/1000MBaseT(X) auto negotiation speed, Full/Half duplex mode, MDI/MDI-X connection
System LED	M12 Ports: Link/Act: Green 1 ~ 5 PoE: Amber 1 ~ 4, Power: PWR
M12 Ports Features	M12 8Pin X-Code Gigabit connector M12 5Pin A-Code Power port connector M12 5Pin A-Code Alarm connector
Power Requirement	
Connection	5 Pin A-coded M12 connector
Input Voltage	Redundant Dual Inputs
Power input	48VDC (44 to 57VDC)
Remarks	Meet EN 50155 standard
No-load Power Consumption	5W @ 48VDC
Full-load Power Consumption	8W @ 48VDC (Full loading without PDs' consumption)
Power Budget	250W @ 48VDC for total PDs' and switches' consumption
Redundant Dual Inputs	Present
Reverse Polarity Protection	Present
Over current protection	Present
Mechanical	
Housing	Aluminium alloy waterproof housing
IP Rating	IP67
Dimensions (W × H × D)	150 × 161 × 55 mm
Weight	1150g
Installation	wall mounting
Environmental	
Operating Temperature	-40 to 75°C (-40 to 167°F)
Storage Temperature	-40 to 85°C(-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Warranty	5 years
Standard	
EMI	FCC Part 15, CISPR (EN55022) class A
EMS	EN61000-4-2 (ESD),Level 4, EN61000-4-3 (RS),Level 3, EN61000-4-4 (EFT),Level 4 EN61000-4-5 (Surge),Level 4, EN61000-4-6 (CS),Level 3, EN61000-4-8,Level 5 IEC60068-2-27, IEC 60068-2-32, IEC60068-2-6 EN50155, EN50121-3-2, EN50121-4

Function interface



Installation dimensions

