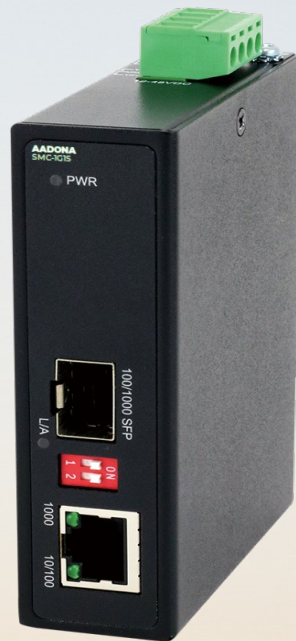


Model: SMC-1G1S
Series: SAPPHIRE



Industrial Media Converter – 1*10/100/1000Tx + 1*100/1000 SFP Slot



Flexible, Reliable and Industrial-grade Network Distance Extension Solution

AADONA SMC-1G1S is an Industrial Gigabit Media Converter providing non-blocking wire-speed performance and great flexibility for Gigabit Ethernet extension in harsh industrial environment. It is equipped with one 10/100/1000BASE-T RJ45 copper and one 100/1000BASE-X SFP fiber optic interface delivered in an IP30 rugged strong case with redundant power system. The SMC-1G1S is well suited for applications in deploying surveillance system, and securing control and wireless service in climatically demanding environments with wide temperature range from -40 to 75 degrees C. With 10K jumbo frame feature support, the SMC-1G1S can handle extremely large amounts of data transmission in a secure topology linking to a backbone or high-power servers.

Fiber-Optic Link Capability Enables Extension of Network Deployment

The SFP slot of the SMC-1G1S is compatible with 100BASE-FX and 1000BASE-SX / LX / WDM through SFP (Small Form Factor Pluggable) fiber-optic transceivers. The fiber optic uplink capability guarantees the throughput to all nodes hooked into the network and the Gigabit Ethernet distance can be extended from 550 meters (multi-mode fiber cable) to 10/20/30/40/50/60/70/120 kilometers (single-mode fiber cable), and also the Fast Ethernet distance can be extended from 2km (multi-mode fiber cable) to 20/40/60 kilometers (single-mode fiber cable). It is the ideal product for applications within the factory data centers and distributions.

Enhanced Smart Management Features

The SMC-1G1S provides auto MDI/MDI-X on its TP port and built-in Link Fault Pass-through function (LFP). The LFP function includes Link Loss Carry Forward (LLCF) and Link Loss Return (LLR), both of which can immediately alarm administrators the problem of the link media and provide efficient solutions to monitoring the net. LLCF means when a device connected to the converter and the TP line loses the link, the converter's fiber port will disconnect the link of transmission. LLR means when a device connected to the converter and the fiber line loses the link, the converter's fiber port will disconnect the link of transmission. Therefore, the SMC-1G1S greatly supports the administrators to manage the network efficiently.

Environmentally Hardened Design

The SMC-1G1S is equipped with the slim-type IP30 metal case for easy deployment in heavy Industrial demanding environments. With IP30 industrial case protection, the SMC-1G1S provides a high level of immunity against electromagnetic interference and heavy electrical surges which are usually found on plant floors or in curb-side traffic control cabinets. Being able to operate under the temperature range from -40 to 75 degrees C, the SMC-1G1S can be placed in almost any difficult environment. The SMC-1G1S also allows either DIN rail or wall mounting for efficient use of cabinet space.

Convenient and Reliable Power System

To enhance the operation reliability and flexibility, the SMC-1G1S is equipped with two DC power input connectors for redundant power supply installation.

Key Features

- 1-port 10/100/1000Tx Gigabit Ethernet
- 1-port 100/1000 SFP Slot
- LFP function support
- Redundant Power Input Design, 12-48VDC
- IP30 Rugged Metal Case Design
- DIN-Rail Mounting, Wall Mounting
- Operating Temperature Range - STD: -10°C ~ 70°C, EOT: -40°C ~ 80°C

Applications

Hardened Environment Application

AADONA SMC-1G1S Industrial Gigabit Media Converter offers full port Gigabit speed. It provides very high reliability and security features to make sure continuous operation in harsh environments such as transportations, factories, outdoors and places where extremely low or high temperatures can be experienced.

Moreover, the SMC-1G1S is also compatible with 100Mbps and 1000Mbps SFP transceivers to provide a strong, stable and long-distance connection and flexible industrial networking deployment.

SPECIFICATIONS

Basic

| | |
|---------------------|--|
| Product Description | Industrial Media Converter - 1*10/100/1000Tx + 1*100/1000 SFP Slot, 12-48VDC Power Input |
| Model Name | SMC-1G1S |
| Product Family | Sapphire |
| Total No Of Ports | 1+1 = 2 |
| Warranty | 3 Year Warranty |

Technology

| | |
|-----------------|---|
| Standards | IEEE 802.3 10BaseT Ethernet IEEE 802.3u 100BaseTX Fast Ethernet IEEE 802.3ab 1000BaseT IEEE 802.3z 1000Base-X Gigabit Fiber |
| Processing Type | Store and Forward |
| Protocol | CSMA/CD |
| Flow Control | IEEE 802.3x flow control, back pressure flow control |

Switch Properties

| | |
|----------------|------------------|
| Memory Buffer | 1Mbits |
| Jumbo Frame | 10Kbytes |
| MAC Table size | 8K Mac Addresses |

Interface

| | |
|----------------|---|
| RJ45 Ports | 1*10/100/1000BaseT(X), auto-negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection |
| Fiber Port | 1*100/1000 SFP Slot |
| LED Indicators | Power 1, Power 2, Fault Ethernet Ports: On-Link/Flash-data transmitting SFP: Link/Active |
| Wavelength | Depends on SFP modules |
| DIP Switch | DIP Switch 1: LFP(Link Fault Pass) Enable/Disable DIP Switch 2: 1000Mbps / 100Mbps |

Power Requirements

| | |
|-------------------|--|
| Power Supply | External Din-Rail Industrial Power Supply Unit (Not included & to be purchased separately) |
| Input Voltage | 12-48VDC, Redundant Input |
| Power Connection | 1 removable 4-contact terminal block |
| Power Consumption | 1.8Watts |

Mechanical Characteristics

| | |
|------------|--|
| Housing | Metal, IP30 protection |
| Dimensions | 26 x 95 x 75 mm (W x H x D) |
| Weight | Unit Weight: 0.2kg, Shipping Weight: 0.4kg |
| Mounting | DIN-Rail Mounting, Wall Mounting |

Environmental Limits

| | |
|---------------------------|---|
| Operating Temperature | STD: -10°C ~ 70°C (14°F ~ 158°F); EOT: -40°C ~ 80°C (-40°C ~ 176°F) |
| Storage Temperature | -40°C ~ 85°C (-40°F ~ 185°F) |
| Ambient Relative Humidity | 5 to 95%, (non-condensing) |

Regulatory Approvals

| | |
|---------------------------|---|
| Safety and Certifications | CE, EN, LVD, RoHS EN61000-4-5 (for RJ45 Port, Surge 6KV) EN 55032:2015 EN 55024:2010+A1:2015 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 60950-1:2006 ISO Standard: ISO 9001:2015 ISO 14001:2015 ISO 27001:2013 |
|---------------------------|---|

*All specifications are subject to change without notice.



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