SIGNAMAX™
CONNECTIVITY SYSTEMS
An AESP Company

Network Connectivity Systems

10/100/1000 to Gigabit SFP DIN Rail Mount Industrial Media Converter

Signamax Connectivity Systems' 065-1896SFPTB 10/100/1000BaseT/TX to 1000BaseSFP media converter has been developed to operate flexibly at Standard Ethernet, Fast Ethernet, or Gigabit Ethernet speeds in harsh industrial environments that require ruggedized equipment that can operate in severe temperature extremes. This media converter is an affordable solution for outdoor environments, transportation roadside systems, shop floors, and other harsh environments where consistent operation at temperature extremes of -40°F to 176°F (-40°C to 80°C) is necessary and varying Ethernet speeds interface to a fiber optic Gigabit Ethernet network. The SFP receptacle meets the SFP Multi-Source Agreement, and will operate with a variety of SFP module models that can transmit over either multimode or singlemode fiber. This media converter is a compact, plug-and-play device that does not require complex user setup, but also has the manual setting features necessary to adjust to unusual operating conditions.

KEY FEATURES

- Meets NEMA TS1 Environmental Requirements for Traffic Control Equipment.
- Meets IEC61000-6-2 EMC Generic Standard Immunity for Industrial Environment.
- One Auto-Negotiation and Auto-MDIX 10/100/1000BaseT/TX RJ-45 port
- One SFP socket for Gigabit fiber optic extension.
- DIP Switch Configuration for Link Fault Signaling, Link Down Alarm, plus Fiber Auto/Force Mode.
- Non-Blocking, for Full Wire-Speed Performance
- Alarms for Power Failure and Port Link Failure via Relay Output.
- Redundant 24V DC Terminal Block Power Inputs
- UL 508 listed
- Supports DIN-Rail or Panel Mount Installations

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1000BaseT to 1000BaseSFP DIN-Rail Hardened Media Converter	
065-1896SFPTB	10/100/1000BaseT/TX to 1000BaseSFP Industrial Hardened Media Converter, 24 V DC Redundant Power Terminal Block
1000Base SFP Hardened Temperature Range (-40° C to 85° C) Fiber Modules:	
065-79SXMG-H	1000BaseSX SFP Module - MM/LC, 220m Span on 62.5µm Fiber / 550m Span on 50µm Fiber
065-79SXEDMG-H	1000BaseSX SFP Module 1310 nm - MM/LC, 2 km
065-79LXMG-H	1000BaseLX SFP Module 1310 nm - SM/LC, 10 km
065-79LXEDMG-H	1000BaseLX SFP Module 1310 nm - SM/LC, 40 km
065-79XDMG-H	1000BaseXD SFP Module 1550 nm - SM/LC, 40 km
065-79ZXMG-H	1000BaseZX SFP Module 1550 nm - SM/LC, 80 km
065-79EZXMG-H	1000BaseEZX SFP Module 1550 nm - SM/LC, 110 km

SPECIFICATIONS

www.signamax.com

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- **APPLICABLE STANDARDS:**
  IEEE 802.3 10BaseT
  IEEE 802.3u 100BaseTX
  IEEE 802.3ab 1000BaseT
  IEEE 802.3z 1000BaseSX / 1000BaseLX
  SFP Multi-Source Agreement (MSA)

- **FIXED PORTS**
  1 twisted-pair port meeting IEEE 802.3 10BaseT, IEEE 802.3u, or IEEE 802.3ab 1000BaseT standard specifications, Auto MDI/MDI-X and Auto-Negotiation Function supported.
  PLUS
  1 1000BaseSFP port with SFP receptacle meeting SFP Multi-Source Agreement (MSA), supporting IEEE 802.3z 1000BaseSX/LX standard specifications.

- **TWISTED-PAIR CABLE REQUIREMENTS**
  Category 5e or better cable, 100 meters maximum distance for 1000BaseT; Category 5 or better cable, 100 meters maximum distance for 100BaseTX; Category 3 or better cable, 100 meters maximum distance for 10BaseT.

- **LED STATUS INDICATORS**
  Per Unit: Power1, Power2, Power3 (Green). Fault, LFS
  Per Port: 10/100/1000BaseT/TX port: Link/Activity, Speed, Full Duplex/Collision
  1000BaseSX/LX port – Link F, TX, RX

- **PERFORMANCE**
  Throughput @ 1000BaseT: 1,488,100 pps
  Throughput @ 100BaseTX: 148,810 pps
  Throughput @ 10BaseT: 14,881 pps
  (64-byte packets)

- **CERTIFICATIONS**
  NEMA TS1/2 Environmental requirements for traffic control equipment
  ISO: Manufactured in an ISO9001 facility
  Environmental Test Compliance:
  Vibration Resistance (IEC 60068-2-6): 5G@150Hz; Criterion 3
  Operation/Storage/Transport Shock (IEC 60068-2-27):
  25G @ 11ms (Half-Sine Shock Pulse; Operation)
  50G @ 11ms (Half-Sine Shock Pulse: Storage/Transport)
  Free Fall (IEC 60068-2-32): Free Fall: 1M (3.281 ft.)
  ESD Standards (IEC 61000-4-2):
  Enclosure Contact: +/- 4kV; Criteria B
  Enclosure Air: +/- 8kV; Criteria B
  Radiated FRI Standards (IEC 61000-4-3):
  Enclosure Ports: +/- 4kV@2.5kHz; Criteria B
  Burst Standards (IEC 61000-4-4):
  Enclosure Ports: 10V/m, 80 to 1000MHz; Criteria A
  D.C. Power Ports: +/- 4kV; Criteria B
  A.C. Power Ports: +/- 4kV; Criteria B
  Surge Standards (IEC 61000-4-5):
  Signal Ports: +/- 1kV Line-to-earth; Criteria B
  D.C. Power Ports: +/- 0.5kV Line-to-earth; Criteria B
  A.C. Power Ports: +/- 2kV; Line-to-earth; Criteria B
  Induced RFI Standards (IEC 61000-4-6):
  Signal Ports: 10v@ 0.15 - 80 MHz; Criteria A
  DC Power Ports: 10v@ 0.15 - 80 MHz; Criteria A
  AC Power Ports: 10v@ 0.15 - 80 MHz; Criteria A
  Earth Ground Ports: 10v@ 0.15 - 80 MHz; Criteria A
  Magnetic Field Standards (IEC 61000-4-8):
  Enclosure Ports: 30A/m@ 50, 60Hz; Criteria A
  Voltage Dip Standards (IEC 61000-4-11):
  AC Power Ports: 30% Reduction for 0.5 period; Criteria B

- **ENVIRONMENT**
  Operating Temperature: -40°F to 176°F (-40°C to 80°C)
  Storage Temperature: -50°F to 200°F (-45°C to 93°C)
  Operating Humidity: 10 to 95% (non-condensing)

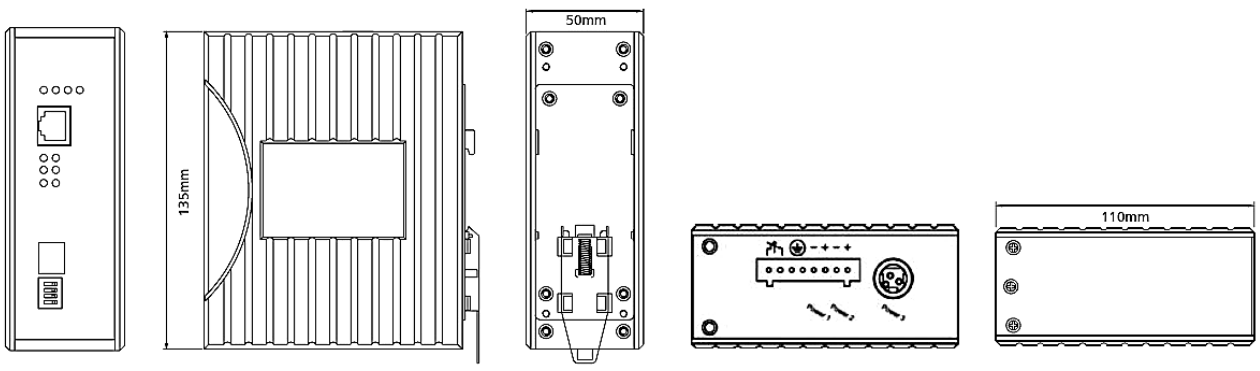
- **INSTALLATION**
  DIN Rail Kit included and pre-installed.

- **EMISSIONS**
  FCC: Part 15 Class A
  CE: EN55022 (CISR22 Class A), EN55024 (CISPR24 Class A), CE EN-6100-4-4, CE EN6100-4-5, CE EN6100-4-6

- **SAFETY**
  UL 508

- **WARRANTY**
  Lifetime

Product Diagrams:



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