MNEC Communications
MN-NETS\textit{W}1, MN-COM1S

Overview

\textbf{MN-NETS\textit{W}1}

\textbf{Four-port MNEC multimode fiber optic Ethernet switch}
The MN-NETS\textit{W}1 is an industrial grade, 10/100 Mbps auto-negotiating Ethernet switch used in Mass Notification/Emergency Communications (MNEC) and Fire Alarm applications to connect EST3-Sixty’s FireWorks workstation to the MN-FVPN VoIP module and/or the MN-COM1S RS-232 interface. The MN-NETS\textit{W}1 provides four RJ-45 ports for local connections and two full-duplex multimode fiber ports for remote connections.

The MN-NETS\textit{W}1 has three LED indicators

- \textbf{Power}: On indicates the MN-NETS\textit{W}1 has power.
- \textbf{Link}: On indicates Ethernet link has been established. Flashing indicates link is active.
- \textbf{HS}: Indicates data transferring at 100 Mbps.

\textbf{MN-COM1S}

\textbf{MNEC Serial Communications/LAN interface}
The MN-COM1S is a TCP/IP to RS-232 interface with one RJ-45 port and one RS-232 port. It is used in MNEC settings to connect a FireWorks workstation to an EST3 control panel.

Both the MN-NETS\textit{W}1 and the MN-COM1S mount on an MN-BRKT1 or an MN-BRKT3 bracket. These install inside the EST3 control panel or Auxiliary Power Supply for a neat and self-contained MNEC solution.

Standard Features

\textbf{MN-NETS\textit{W}1 Four-port MNEC Ethernet Switch}
- Connect alarm panels to a remote FireWorks workstation over TCP/IP, LAN/WANs
- Supports MNEC and Fire Alarm applications
- Implement VoIP communications between EST3-Sixty nodes
- 10/100BASE-T Ethernet interface (RJ45)
- Supports MN-COM1S for Serial connection to 3-CPU3
- Supports MN-FVPN for VoIP communication between FireWorks workstations
- Four RJ-45 ports for local connections
- Two full-duplex multimode fiber ports for remote connections.
- Configuration and port director software included
- Flash ROM for easy software upgrade

\textbf{MN-COM1S MNEC Serial Communications/LAN interface}
- Connect a FireWorks workstation to an EST3 control panel.
- RS-232 Serial port for connection to 3-CPU3
- One RJ-45 port
- One RS-232 port
- Browser-based setup and configuration
Mounting
The MN-NETSW1 and the MN-COM1S mount on an MN-BRKT1 or an MN-BRKT3 bracket. These install inside the EST3 control panel or Auxiliary Power Supply for a neat and self-contained MNEC solution.

Component Layout
EST3 Control Panel

Component Layout
APS Auxiliary Power Supply
Wiring

**NOTES**

- The FireWorks computer must be within 20 feet and in the same room as the MN-NETSW1. Run cable through conduit and attach the conduit to the FireWorks computer using the required conduit adapter.

- Use the control panel power supply or a compatible regulated 24 VDC power supply that is UL/ULC listed for fire protective signaling systems.

**WARNING:** This is a Class A product. In a domestic environment, the product may cause radio interference in which case the user may be required to take adequate measures.
Specifications, MN-COM1S

Voltage | 18 to 28 VDC  
Current | 60 mA  
Dimensions (W × H × D) | 2.5 × 0.9 × 3.5 in. (6.4 × 2.3 × 9.0 cm)  
Serial interface | RS-232C  
Network Interface  
Connector | RJ-45  
Cable type | Category 5, min.  
Other | 10/100 Mbps, TCP/IP, autonegotiating  
Operating environment  
Temperature | 32 to 120°F (0 to 49°C)  
Humidity | 0 to 93% RH, noncondensing at 90°F (32°C)  
Specifications, MN-NETSW1

Voltage | 18 to 28 VDC  
Current | 350 mA, max.  
Dimensions (W × H × D) | 1.75 × 7.54 × 5.54 in. (44 x 191 × 138.4 mm)  
Fiber optic ports  
Quantity | 2  
Connector type | ST  
Signaling/Data Rate | 100Base-FX / 100 Mbps  
Attenuation | 13 db, max. at a 1310 wave length  
Operating environment  
Temperature | 32 to 120°F (0 to 49°C)  
Humidity | 0 to 93% RH, noncondensing at 90°F/32°C  
Segment Length  
Copper Fiber Optic | 3.28 ft (100m)  
Fiber Optic Budget | ~6,562 ft (2km) multi mode fiber  
10dB  
Segment Media  
Copper Fiber Optic (1300 nm) | Category 6 UTP  
50/125 or 62/5/125 Multi Mode Fiber  
Agency Listings | CE; FCC Part 15, Class A; EN50081-2; EN50082-2; UL-864  
Power Requirements | 24VDC at 21 mA, nominal 10 –36VDC, 5 watts 8-24VAC, 47 – 63 Hz, 5 VA  
Ordering Information  
MN-COM1S | UL 864 Listed FireWorks Communications Ethernet Port, Command & Control. Comes with power and RS232 data cables  
MN-NETSW1 | Four-port multimode fiber optic Ethernet switch  
Related Equipment  
MN-BRKT1 | MN-FVP mounting bracket for EST3 enclosures  
MN-BRKT3 | MN-FVP mounting bracket for APS-(6)(10)A power supplies  
FW-NCCA4 | Ethernet cable conduit connector assembly for UL4 computer  
MN-FVPN | Polymer mounting bracket for MN-FVPN  
MN-FVPN | Fire VoIP encoder/decoder, includes power and audio cables  
MN-PASM | MN-FVPN preamp signal supervisory booster module (1 required per MN-FVPN, along with SIGA-RM1 or SIGA-MRM1)  
SIGA -RM1/MRM1 | Riser Supervision Module  
MN-ABPM | Audio Bridge (Panel mount 3-ATPINT)