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Product Data Sheet – Ethernet/Encoder Product Family

(10/25/2021)

Unit shown: ETN 8 Port Managed Switch

Model Number: ETN-MS8

P/N: 28100-300

General:

As part of Eon's **V**ideo **D**istribution **A**rchitecture a series of ethernet managed switch, video distribution and encoder units are now available. These products range from 8 port 10/100/1000 Mbps managed switches to switches that include NTSC splitters and encoders that convert NTSC to H.264/265 and MPEG2 formats for ethernet distribution. All units include redundant 12 to 48 vdc power inputs for failsafe operation. Like all other Eon products these units can be customized for different connectors, power inputs and video processing. All ethernet products are fully qualified to Environmental and EMI MilSpec DO-160, 461, 704, and 810.

The ETN-MS8 is an 8-port Gigabit managed Ethernet switch with 8*10/100/1000Tx Ethernet ports, based on Antaira Technologies LMX-0800G series. The LMX-0800G series is a fully manageable Layer 2 Ethernet switch that is preloaded with a GUI user-friendly web management console design. It supports the ring network redundancy function using the market's open standard ITU-T G.8032 ERPS (Ethernet Ring Protection Switch) protocol that has a <50ms network recovery time. The advanced network filtering and security functions, such as, IGMP, VLAN, QoS, SNMP, port lock, RMON, Modbus TCP, and 802.1X/HTTPS/SSH/SSL increase determinism and improve network management.

Please access Eon's website for information and engineering staff for our **V**ideo **D**istribution **A**rchitecture products, including rugged military splitters/converters/selectors, cameras, monitors and recorders. Additional Eon product offerings are Interference Blankers, Rugged Power Supplies, Audio Systems and Customized System Engineering Development.

Features:

►8-Port Gigabit Managed Ethernet Switch, with 8*10/100/1000Tx MilS Connectors;
►Two - 12~48VDC MilS Power Input Connectors for Redundant Operation
► Network Redundancy: STP/RSTP/MSTP, and G.8032 ERPS (Recovery Time <50ms)
► Supports IPv4/IPv6, and DHCP Option 66/67/82
► Supports Modbus/TCP Protocol for Device Management and Monitoring
► Configuration: Web Console, Telnet, CLI Command
► IGMP v1/v2 for Multicast Traffic Filtering
► System Warning Setting for Automatic Warning through E-mail
► QoS (IEEE802.1p/1Q), CoS/ToS to Increase Determinism
► IEEE802.1Q VLAN for Easy Network Planning
► Enhanced Network Security with IEEE802.1X, SNMP v1/v2c/v3, HTTPS, and SSH/SSL
► Auto Warning by Exception through E-mail, Relay Output

Configuration:

See the attached Outline and Mounting Drawings.

Specifications:

Finish: (except for screws, base and connectors): Black Anodize, White Lettering
Input Voltage: 2 redundant inputs, each 12 – 48vdc
Power Consumption: 15.0Watts
Power Dissipation: 2.5 Watts
Weight: 3.4 lbs
MTBF: 50,000+operational hours

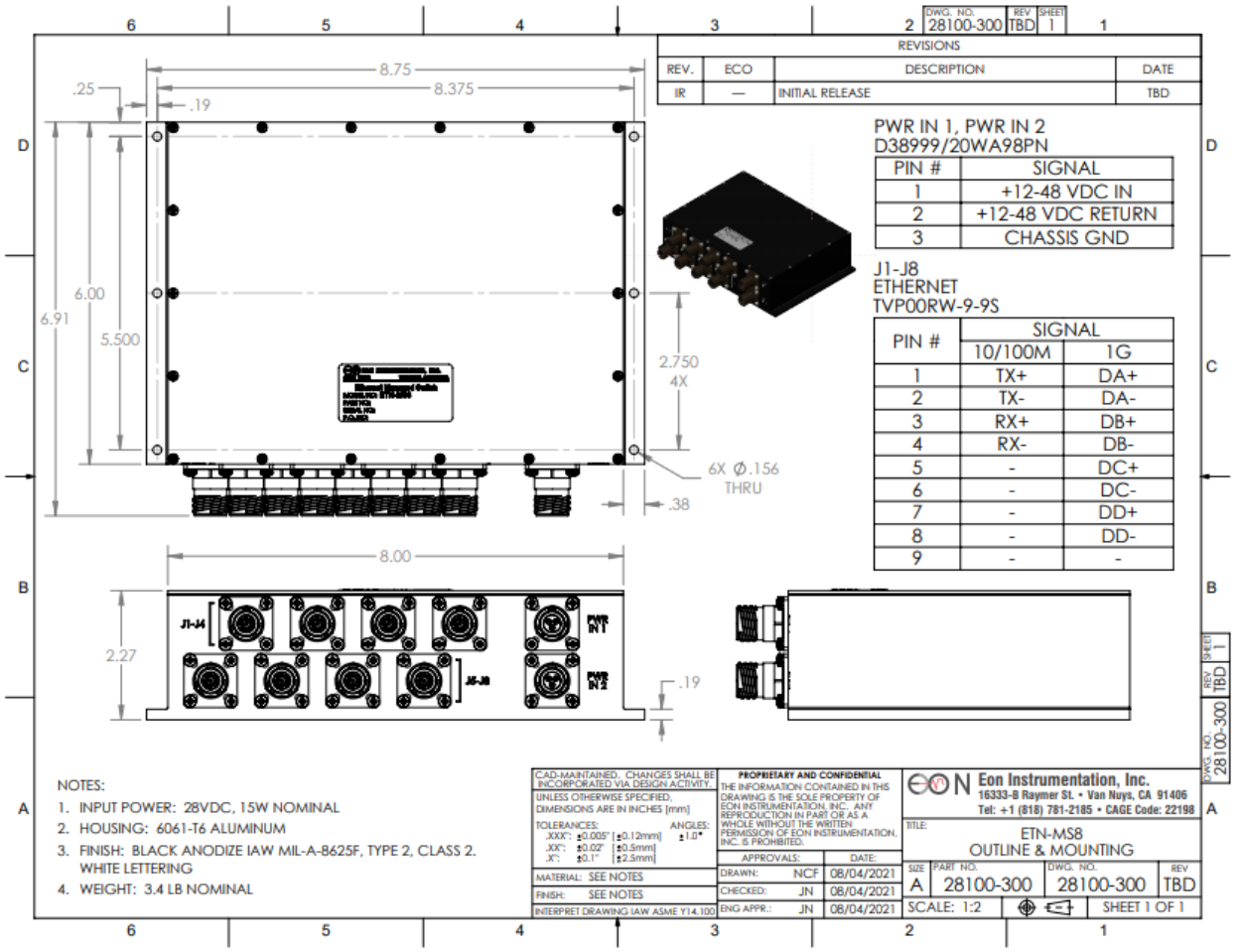
Qualification (Data by similarity available upon request):

Environmental/EMI Heading - Verification Criteria

Temperature and Altitude - RTCA/DO-160G, Section 4, Category B2
Temperature Variation - RTCA/DO-160G, Section 5, Category B
Humidity - RTCA/DO-160G, Section 6, Category B
Shock (Op & Crash Safety) - RTCA/DO-160G, Section 7, Category B
Vibration - MIL-STD-810G, Method 514.6, Procedure I, Category 14
RTCA/DO-160G, Section 8
Explosive Atmosphere - RTCA/DO-160G, Section 9, Category E
Rain - RTCA/DO-160G, Section 10, Categories Y & W
Fluids - RTCA/DO-160G, Section 11, Category F, Class: Solvent & Cleaning Fluids
Sand & Dust - RTCA/DO-160G, Section 12, Category S
Fungus - RTCA/DO-160G, Section 13, Category F
Salt Fog - RTCA/DO-160G, Section 14, Category S
Magnetic Effects - RTCA/DO-160G, Section 15, Category Z
Electrical Power - MIL-HDBK-704F LDC101, LDC103, LDC104, LDC105, LDC201,
LDC301, LDC302,LDC601, LDC602
Voltage Spike - RTCA/DO-160G, Section 17, Category A

Audio Freq Conducted Susceptibility - RTCA/DO-160G, Section 18, Category Z OR MIL-STD-461F, CS101
Induced Signal Susceptibility - RTCA/DO-160G, Section 19, Category ZC
Radio Frequency Susceptibility - RTCA/DO-160G, Section 20, Category YY
OR MIL-STD-461F, CS114 – Curve #5 and RS103 –Aircraft (External or Safety Critical)
Emission of Radio Frequency Energy - RTCA/DO-160G, Section 21, Category M
OR MIL-STD-461F, RE102 (Helicopters), CE102
Lightning Induced Transient Susceptibility - RTCA/DO-160G, Section 22, Category A2J3M3
Lightning Direct Effects - RTCA/DO-160G, Section 23, Category XXXX
Icing - RTCA/DO-160G, Section 24, Category A. Unit in non icing environment.
Electrostatic Discharge (ESD) - RTCA/DO-160G, Section 25, Category A
Flammability - RTCA/DO-160G, Section 26, Category C
Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation.
MIL-STD-461F, CS115
Conducted Susceptibility, Damped Sinusoidal Transients, Cables and Power Leads.
MIL-STD-461F, CS116

Outline & Mounting Drawing



Connector Specifications

Connectors on Chassis:

Power	D38999/20WA98PN	2 each
1G Ethernet	TVP00RW-9-9S	8 each

Mating Cable Connectors:

Power	D38999/26WA98SN
1G Ethernet	TV06RW-9-9P
Back Shell	M85049/38-9W