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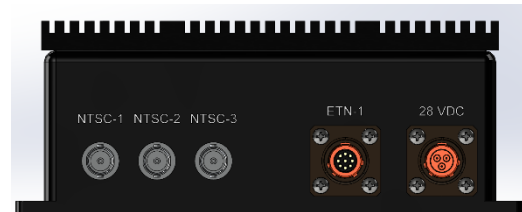
3800 Oceanic Drive, #112  
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## Product Data Sheet – Ethernet Products - ETN-N3-E1

(2/25/2022)

Unit shown: 3 NTSC in/1 GB Ethernet out

Model Number:                      P/N:  
ETN-N3-E1                      connector dependent



### **General:**

As part of Eon's Video Distribution Architecture 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. 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-N3-E1 is a self contained unit with an internal 28vdc power supply. The unit accepts up to 3 NTSC inputs and encodes them to H.264/265 and MPEG2 formats. Each channel can be configured to provide one, two or three formats. The encoded formats are then output via one 10/100/1000 ethernet port. The ethernet port includes configuration, filtering and security functions for <50ms network recovery and determinism.

Please access Eon's website for information and engineering staff for other video products, including rugged military and industrial splitters/converters/selectors, cameras, monitors and recorders. Additional Eon product offerings are Blanking Control Systems; Power Supply Systems; Audio Distribution Systems; Space and Missile Systems; and Instrumentation Technology Systems ( HD-SDI Video Inserters; Recorders; Time Code Generators/Displays; Controllers). Eon's customers include direct contracts with all US Military Departments, Major Primes (e.g. Lockheed Martin, Boeing, General Dynamics, L3Harris, Raytheon, Northrop Grumman, BAE Systems) and International Aerospace/Defense organizations (The Airbus Group, Embraer, Thales Group, Elbit Systems, UK Defense).

### **Configuration:**

See the attached Outline and Mounting Drawings.

### ***Specifications:***

*Finish:* (except for screws, base and connectors): Black Anodize, White Lettering

*Input Voltage:* 18 -36vdc

*Power Consumption:* 15.0Watts

*Power Dissipation:* 2.5 Watts

*Weight:* 1.5 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

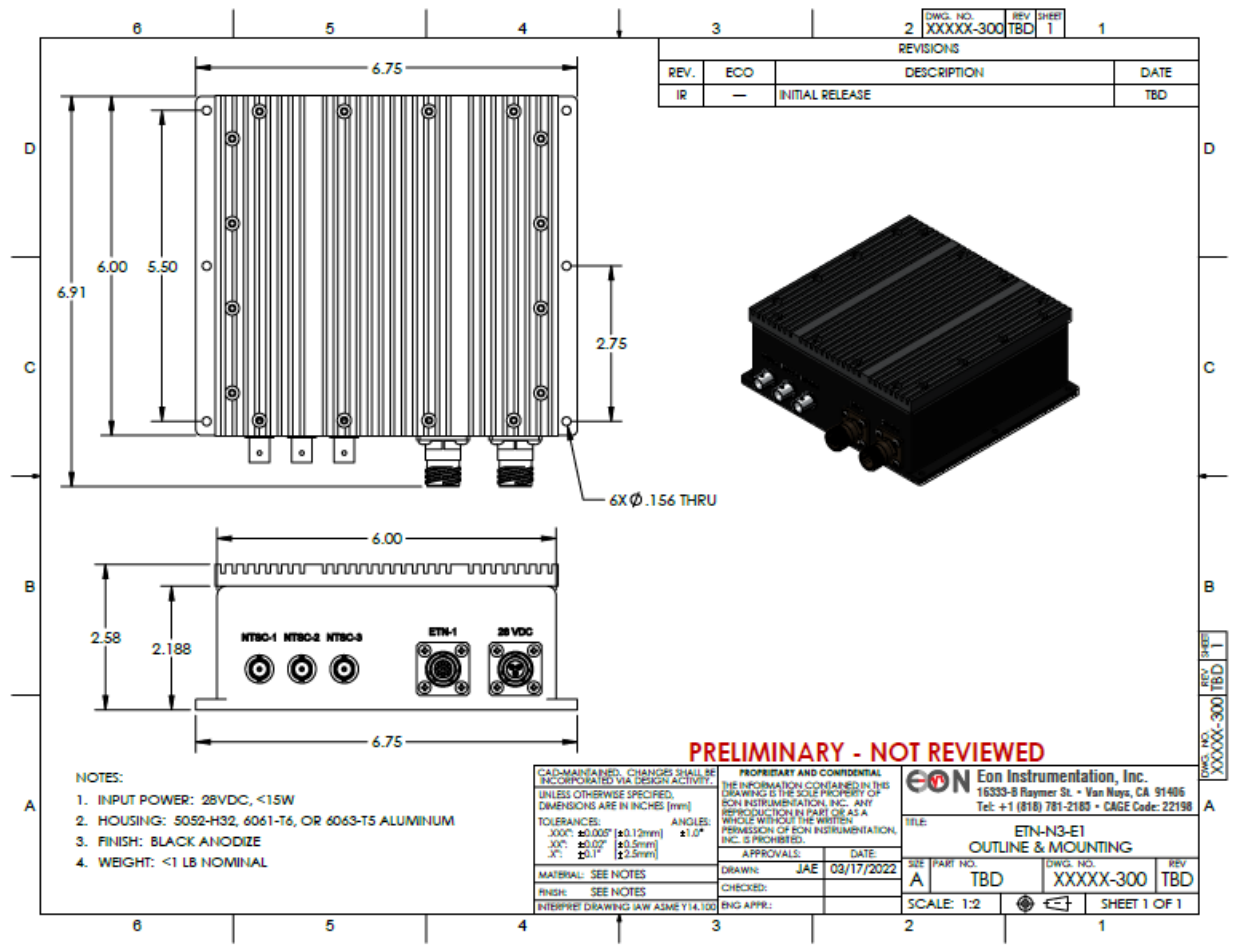
Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation.

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
NTSC	BNC
1G Ethernet	TVP00RW-9-9S

### Mating Cable Connectors:

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