



Miniature Ethernet Data Acquisition and Encoding Unit

Description

The TTC MnENT-2000-1 is a miniature networked encoding unit. Inbound Ethernet packets are timestamped and filtered at the MAC level based on MAC address or at the UDP or TCP level based on destination and source IP address and port number.

Once filtered, packets are encoded using the NPD protocol then processed and delivered to designated network nodes.

The MnENT-2000-1 has five stacked modules: an inbound Ethernet I/O, timestamp and filter module, a secondary processor, a processor module that performs NPD encoding, an Ethernet egress module and a 15 W power supply module.



MnENT-2000-1

Features

- Network-based Ethernet data acquisition, filtering and encoding unit
- Terminates twisted pair 10/100 Base-T Ethernet to one-channel Ethernet I/O module
- Timestamps and filters Ethernet packets
- Filtering available on MAC or IP(v4) layers
 - ◊ MAC layer filtering on source and destination MAC addresses
 - ◊ IP layer filtering on UDP or TCP by two of the following four: IP source address, IP destination address, UDP or TCP source port and UDP or TCP destination port
 - ◊ Filters can catch-all, include or exclude traffic
- Includes Fast Ethernet 10/100 Base-T port for:
 - ◊ Acquisition setup and configuration
 - ◊ SNMP status and control
 - ◊ IEEE 1588-compliant time synchronization
- SNMP MIB support for statistics monitoring
- Environmentally-sealed casing
- Miniature installed footprint

Applications

- Flight and ground-based test instrumentation
- Avionics data acquisition
- Vehicle test, certification and development
- Ethernet-based network distributed systems
- System safety monitoring

Identification
Header Checksum

Total Length
Time to Live
Protocol

Type of Service
Fragment Offset

IHL
Version
Flags