



APOGEE LABS

4033

AETHI2 Ethernet Bridge Module



FEATURES

- Gathers data from an Ethernet LAN
- Supports 10/100/1000 connectivity
- Ethernet data rates up to 24 Mbps
- Programmable bridge transport link rate
- Supports unidirectional transmission as a stand alone card
- Supports bi-directional operation in combination with 4034 AETHO2 module

OVERVIEW

The AETHI2 is an Ethernet bridge module that is part of the AL4000 Multiplexer/Demultiplexer family. It allows the user to create an Ethernet bridge between an AL4000 unit and an AL4000 or AL4300 unit. It forwards information at rates up to the maximum theoretical rate of 36,000 frames per second if sufficient transport link bandwidth is allocated. The AETHI2 module is a single slice high AL4000 series compatible device that contains a Micro-D 37-pin connector on its I/O panel for a 10/100/1000 LAN connection.

The interconnecting multiplex bandwidth is user programmed in the range between 128 Kbits per second to 24 Mbps per second. Ethernet frames are transmitted within source packets with an embedded user programmed channel identifier (CHID). The source packets are encapsulated in a CCSDS transfer frame. The channel ID, which identifies the source data stream, allows an Ethernet output module to capture and reproduce the desired source LAN traffic. Only one AETHI2 module can be used in an AL4000 stack.

The AETHI2 is designed to function as an input only module. This module is used in a unidirectional receive-only data-link application. Where full duplex operation is needed, the AETHI2 module is used in combination with a 4034 AETHO2 module. The 4033 AETHI2 is used in conjunction with the Apogee Labs' 2319 ETHIO5 module.

SPECIFICATIONS

GENERAL

- Single height module, 0.40" x 2.5" x 4.0"
- Compliant with IEEE 802.3 / Ethernet V.2
- 10/100/1000 connectivity (UDP/IP or TCP/IP)
- 1024 MAC address table with aging and learning
- Max rate: 36,000 f/s [64 bytes/frame]
- 256 packet frame buffer (minimum)
- Programmable transfer rate: 128 Kbps to 24 Mbps

CHANNEL ID

- User-Programmable 11-bit Value

INTERFACE CONNECTOR

- 37-pin Micro-Miniature D-Type

COMPLEMENTARY HARDWARE

- 2319 ETHIO5
- 4034 AETHO2 (full duplex operation)