Asbury

Synchronous Serial to Ethernet Converter

Features

- ✈ **TDM to IP conversion**
- ✈ **Power over Ethernet (PoE) or Serial**
- ✈ **HDLC Data Sharing**
- ✈ **Built in Encryption**
- ✈ **Bridge HDLC lines over Ethernet**
- ✈ **SEL Mirrored Bits Supported**

Sunhillo's Asbury delivers a Synchronous Serial to Ethernet adapter for the industrial, financial, telecom, and government spaces. The Asbury features full speed HDLC, BISYNC, ASYNC, and raw mode transparent to process data in multiple ways.

The Asbury product replaces expensive and outdated Serial / TDM lines by converting that data to take advantage of cost effective ethernet networks. Beyond TDM lines, the Asbury is capable of supporting the conversion of a wide range of SYNC and ASYNC serial protocols to 10/100 ethernet.

Hardware:

Featuring a male DB-25 connector on one end and an RJ45 connection on the opposite side for LAN, the Asbury is designed to be connected in-line with existing products.

Software:

An intuitive web based GUI simplifies the user experience making setup and operations user friendly.

Design:

Sunhillo has developed a simple cost-effective solution to utilize existing ethernet to maintain your system without an upgrade to your infrastructure. Simply remove your existing serial modem cable and attach the Asbury to the device and ethernet cable to your existing switch.

The Asbury is available as Power over Ethernet (PoE) or Power over Serial (PoS) to accommodate customer needs.

As the Asbury is an in-line component it can be be utilized in a redundant form factor when installed using a DB-25 patch panel.

Utilizing two Asbury's will allow serial devices to connect over ethernet transparently, maintaining operations while eliminating high cost TDM leased lines.

Utilities & Telecommunications

The Asbury has been succesfully tested in a power utility environment with a SEL Relay in a point to point Carrier Grade Network with a total combined delay of 2 milliseconds.

Applications using telecom assisted relaying scheme include

- ✈ Breaker Failure
- ✈ Direct Transfer Trip Signals (DTT)
- ✈ Permissive Overreaching Traffic Trip (POTT)

CONOPS

Technical Specifications

- Async, BiSync, Raw, HDLC

Part Numbers	Description
010-16-ABY-S01	Asbury Base, PoE, Including Ethernet Cable
010-19-ABY-S01	Asbury Base, PoS, Including Ethernet Cable

Power requirements
- 3.1W Max (Power over Ethernet)
- 2.5W Max (Power over Serial)

Weight
- 90g (3.17oz)

Dimensions
- Height: 2.44in / 61.98mm
- Width: 4.04in / 102.59mm
- Depth: 0.97in / 24.56mm

MTBF
- 4,644,678 hours at 30°C

Environmental (Tested to MIL-STD-810G)
- Storage Temperature: -50°C to +60°C
- Operating Temperature: 0°C to +50°C
- Operating Relative Humidity Range: 10-95%, non-condensing
- Operating Altitude: -300 ft to 10,000 ft

Certifications and Compliance
- CE & UKCA Mark
- RoHS3 Directive EU 2015/863
- REACH
- FCC Part 15, Class B
- UL/CSA/IEC/EN 62368-1
- ETL for Canada and US, 3023031
- FAA-G-2100J: Power
- FIPS 140-3 Level 1 (Certificate #5003)
- Asbury Power over Serial FCC Part 15, Class B
- Asbury Power over Ethernet FCC Part 15, Class A