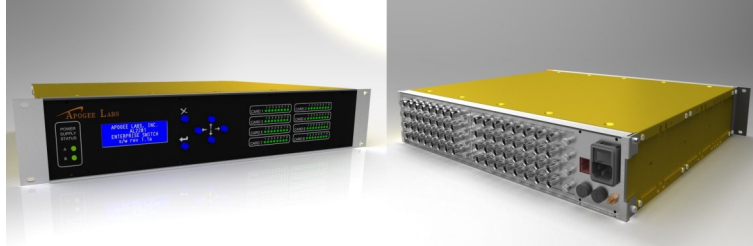# APOGEE LABS

AL1020
10 Channel PCM Mux / Demux
With Independent BERT

Front Panel

Rear Panel

FEATURES

- 10 / 100 / 1000 Mbps Ethernet connectivity
- TCP / IP, UDP / IP (Unicast, Multicast, and Broadcast), TMoIP, SMB, ICMPv2, DHCP, ARP, and Telnet protocols
- Serial Synchronous PCM channel TTL, 1 kbps to 40 Mbps
- PCM Channels can be configured as inputs or outputs
- Data packet structure
  - Raw data IP packets
  - PCM frame aligned IP packets
- OS independent remote control
- SNMP v2 and v3 compliant

OVERVIEW

The AL1020 Mux/Demux System provides a high channel count and cost effective Ethernet transport for serial PCM data. Consisting of 10 serial synchronous PCM input / output channels, a tri-speed (10/100/1000) Ethernet interface, a built in independent BERT, and a universal power input, the AL1020 accommodates the independent transport of ten PCM links in a 2U chassis. The packetized data stream may be sent directly to systems on the user's network or via the Internet, such as remote monitoring or display stations, data processors, or mass storage devices.

The AL1020 enables transport of PCM data and clock with serial rates up to 40 Mbps across LAN's and WAN's at network speeds of 10/100/1000 Mbps with minimal overhead and latency. The product line is built on a core technology that supports full duplex transport speeds in excess of 500 Mbps, which allows for future expansion to utilize the capabilities of higher bandwidth network designs.

Designed for ease of use in a wide range of applications, users need only modify a few settings on the AL1020 to begin transmitting data. However, to accommodate the needs of advanced networks, users may also modify packet sizes, port numbers, protocols, MTU sizes, and other lower level settings.

Future capabilities will include the ability to add interfaces such as RS-422 PCM data, video, analog, audio, time, etc. Please contact factory for additional information.

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SPECIFICATIONS

PCM CHANNELS

- 1 kbps – 40 Mbps
- TTL data/clock Input - 50/75 Ohm, BNC connector
- TTL data/clock output - BNC connector drives a 50/75 Ohm load
- Each channel can be configured as an input or output

BERT

- Independent BERT Interface
- TTL Compatible
- BNC Connectors, 75 ohms
- Rates from 100 bps to 40 Mbps

POWER

- IEC 320-C14 jack
- Supply voltage 90 – 264 VAC

MECHANICAL

- 16.63" W x 13" L x 3.5" H
- Weight: approximately 8 lbs

ENVIRONMENT

- Operating temperature: 0° C to +55° C
- Storage temperature: -40° C to +70° C

RELATIVE HUMIDITY

- Humidity: up to 95% non-condensing

ETHERNET INTERFACES

- SNMP v2 and v3
- 10/100/1000 Mbps Ethernet connectivity
- Protocols supported:

  - TCP/IP
  - TMoIP
  - SMB
  - ICMPv2
  - UDP Retransmit
  - UDP/IP Unicast
  - UDP/IP Multicast
  - UDP/IP Broadcast
  - Telnet
  - ARP

REMOTE CONTROL

- Operating system independent remote control interfaces
- Secure Web Browser – Mozilla Firefox(1.5+) and Microsoft Internet Explorer(6+) supported
- Telnet – Unix/Linux Telnet and Microsoft Telnet supported (Subset of functionality)
- SNMP v2 and v3 compliant

FRONT PANEL DISPLAY

- 4 line LCD Display for setup/status
- User keys for display control
- Software lockable to make read only

APPLICATIONS

Real-time transmission of telemetry data from its source location to one or multiple destinations… either short distances through a LAN or longer distances through a WAN or ISP.

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