

# Telemetry needs have evolved... So have we.

# Introducing the next generation Apogee Mux.



# 20 years of telemetry experience in one box.

# AL1020

# **Telemetry (TM) Serial Data Gateway**

# Industry-Leading 10-Channel Capability in a Single Chassis



The AL1020 distributes Serial PCM data over a wide range of commercial IP-based networks, in real time and with very low latency... either short distances through a LAN or longer distances through a WAN or ISP. The system enables the transmission of multiple telemetry streams from one point to multiple locations while maintaining their time-data relationships, making it a highly reliable and economical alternative to dedicated serial interconnection systems. Moreover, the embedded system management software is easy to set-up and enables monitoring of the distribution network via a user-friendly Graphic User Interface (GUI) or secure SNMP Connection.

- High channel count, cost effective Ethernet transport of 10 PCM Links
- TCP/IPv4 and TCP/IPv6 compliant
- Minimal overhead and ultra-low latency
- Serial PCM channel TTL/422, 1kbps 40Mbps
- Web browser-based remote control

- Flexible Configuration: Each channel can be configured as either an input or output
- 10/100/1000 Mbps Ethernet interface
- Integrated BERT with link delay
- Low profile form factor 2U Chassis
- Front Panel Display and LEDs for set-up and status

Future capabilities will include interfaces for video, analog, audio, time, RS-422 PCM data, and other signal types. Contact us to discuss your specific requirements!



## **SPECIFICATIONS**

#### PCM DATA INPUT

- 1 kbps 40 Mbps
- TTL /422 data/clock Input 50/75 Ohm, BNC/Triax connector

#### PCM DATA OUTPUT

- Supports rates from 1 kbps to 40 Mbps
- TTL /422data/clock output BNC/Triax connector drives a 50/75
  Ohm load

## BIT ERROR RATE TESTER (BERT)

- Integrated BERT Interface
- Rates from 100bps 40Mbps
  POWER
- IEC 320-C14 jack
- Supply voltage 90 264 VAC

## ENVIRONMENT

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

### MECHANICAL

- 17" W x 13" L x 1.75" H
- Weight: Approximately 6.5 lbs

### RELATIVE HUMIDITY

• Humidity: up to 95% non-condensing

- ETHERNET INTERFACES
- SNMP v2 and v3
- 10/100/1000 Mbps Ethernet connectivity
- Protocols supported:
  - TCP/IPv4 & IPv6
    - TMoIP UDP/IP Multicast

UDP/IP Unicast

UDP/IP Broadcast

SMB

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- ICMPv6

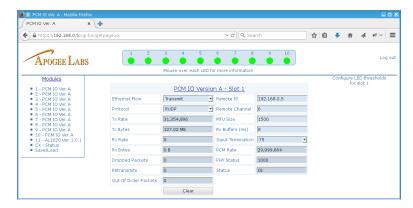
### FRONT PANEL DISPLAY

- Front Panel Display for setup/status
- Channel Status LED Indicators

### TIMING

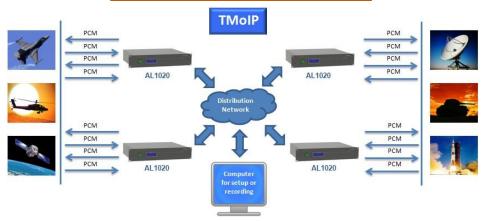
- SNTP (Optional)
- IRIG-B

## SYSTEM MANAGEMENT SOFTWARE



Ease of set-up and use and rapid diagnostic capabilities are the cornerstones of the embedded AL1020 system management software. The specialized software provides top level management information on each end of the TMoIP connection, including data to assess network functionality. Moreover, with remote control capability, operators at any end of the TMoIP network can drill down to view the telemetry data from any input channel and assess channel status, I/O counts and parameters, IRIG timing, and error counts, among other data... all through the user-friendly Graphic User Interface (GUI) or a secure SNMP connection.

# APPLICATION OVERVIEW



- ARP
- DHCP
- Retransmit UDP/IP Unicast
- UDP/ SSH / Telnet Unica