

Dual Channel TMoIP Gateway

MODEL 2350/2351



KEY FEATURES

Dual Channel Independently programmable as transmit or receive Supporting Bit Rates from 100 bps to 40Mbps

Includes both TTL & RS-422 I/O

Ethernet 10 / 100 / 1000 base-T; UDP Data Protocol; Unicast or Multicast; Ethernet Auto detect; Auto rate detection/tracking

Supports IRIG 218-10 & 20 and Optional IRIG 106 Ch 7*, Ch 10/11 * & AE Format*

Frame Sync/Pattern Detector for each CH Supporting Frame Aligned and Non-Frame Aligned Modes (Packed & Throughput modes)

Low Latency & Low Channel-to-Channel Skew

Link Test PRN BERT Function; PRN Pattern Generation/ Simulation (PRN 11, 15 & 23)

Web Browser GUI with Enhanced Channel Status and Error Reporting

Link Test PRN BERT Function; PRN Pattern Generation/ Simulation (PRN 11 & 15)

IRIG B Time Input / Output (Std), NTP*

Optional Bit Synchronizers*

* Optional

GENERAL DESCRIPTION

The Model 2350 Telemetry Gateway provides the signal processing required to pass telemetry PCM data to or from an Ethernet network. User programmability allows the unit to operate as a Telemetry-to-Ethernet converter (packetizer) or an Ethernet-to-Telemetry converter (de-packetizer). The Model 2350 is offered as a rack-mount unit, with the Model 2351 available in a table-top configuration, each accommodating a single dual-channel module.

Each module channel is independently configurable as either a packetizer or de-packetizer. The Dual Channel PCM Module accepts up to two data streams with associated coherent clocks. PCM data is captured and packetized into Ethernet packets with header information. Packet size and buffering may be user-selected or automatically controlled to minimize latency.

A remote unit receives the Ethernet packets and de-packetizes the PCM data. Using statistics provided by the packetizer, the de-packetizer reconstructs the original PCM data stream and coherent clock. Input PCM streams may be independent in content and rate. In typical applications, packetizer inputs come from PCM sources such as bit synchronizers connected to telemetry receivers (optional internal bit synchronizers are available).

The data is transported over the network to a remote unit, where the de-packetizer reconstructs output clock and PCM data for direct connection to a PCM frame synchronizer/decommutator. Alternatively, the data can be sent to a remote processing unit. Frame synchronization and packet alignment within the packetizer simplify downstream software decommutation.



RELATED PRODUCTS

Receivers	Best Source Selector	Ethernet Recorder	Gateway

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TECHNICAL SPECIFICATIONS

Data I/O:	TTL & Clock (User configured as Input or Output); 1 port standard, 2 ports RS-422 Independent inputs and outputs; 1 port standard, 2 or 4 ports Optional
Time I/O:	IRIG-B, 1 input, 1 output (Optional) [B120] for each group; of two ports
Serial Clock/Data Rate:	40 bps to 40 Mbps [70 Mbps Aggregate (per 2-channels)]
Digital Bit Synchronizer:	5 bps to 20 Mbps NRZ codes; to 10 Mbps, all other codes
Frame Sync Pat Detector:	64 Bit Pattern Detector
Network Interface:	Ethernet 10/100/1000-T IPv4 (IPv6 Optional)
UDP Packet Size:	1500 Bytes Maximum
TCP Packet Size:	1500 Bytes Maximum
Data Transport Latency:	<10ms - Measured Serial Input to Serial Output with units connected back-to-back (≥ 1M bps)
Control / Monitor Interface:	Web browser (MS IE ver. 6.0 or higher, Firefox, ...)
Power Input:	90-264 VAC Auto Sensing; 47-63 Hz; 72W max operating; MD2350-M02: 20WDC (12V@ 1.5A max)
Network Packet Format:	GDP Format Throughput and Frame Aligned IRIG-218-10 and IRIG-218-20 TMoIP IRIG-106 Ch-10* Packed and Throughput modes AE* Format (Option); BPCM Format, (Option)
Operating Temperature:	Operating 0°C to +45 °C Storage -40 to +70 °C
Relative Humidity:	Up to 95% RH (no condensation)
Altitude:	0 to 10,000 feet Above Sea level
Size:	MD2350: 1.75-inches (H) x 19-inches (W) x 14-inches (D) MD2351: 2-1/4 inches (H) x 6-3/4 inches (W) x 6-1/2 inches (D)
Mounting:	MD2350: Standard 19-inch EIA rackmount MD2351: Table-top
Weight:	MD2350: 7 lbs MD2351: 2 lbs

Recognizing that no standard product fits every mission, Delta Telemetry Systems is ready to deliver tailored solutions for your unique application requirements.

Specifications subject to change without notice.