

Model 2350A-M6/2350A-M12

Telemetry Gateway Six/Twelve Channel TM (PCM) over IP

General Description

Features

- Six/Twelve Channel Configurations
- Independently Programmable Transmit / Receive
- TTL/RS-422 Data & Clock I/O
- Auto Rate Tracking
- Up to 50Mbps
- Data Only Input, Bit Sync*
- Frame Sync and Alignment*
- Time Input / Output / Packet Tagging
 - IRIG STD 200*
 - NTP*
 - IEEE-1588*
- Ethernet
 - 10 / 100 / 1000 base-T (Standard)
 - SFP Fiber Modules*
 - UDP/TCP/IP Data Protocols
 - Unicast or Multicast
 - IRIG STD 218 Compatible
 - IRIG STD 106 Ch 10 Compatible*
- Very Low Latency—Less than 10ms
- Very Low Channel to Channel Skew
- Integrated BERT for link testing and latency analysis
- Signal Activity and Lock Indicators
- Independent Packetizer and De-Packetizer
- User Interface
 - Java GUI
 - HTTPS/ Web Browser
 - SSH Command Line & SNMP*
- Best Source Selection*
- Redundant Power Supply*
- * Optional Feature



The **Model 2350A Telemetry Gateway** provides the necessary signal processing to pass telemetry data either to or from an Ethernet network. User programmability permits the unit to function as a **Telemetry-to-Ethernet** converter (packetizer) or as an **Ethernet-to-Telemetry** converter (depacketizer). Each channel is individually configurable as either a packetizer or a de-packetizer.

The MD2350A is available in 6 and 12 channel configurations. Each channel accepts PCM data streams with associated coherent clocks. PCM data is captured and packetized into Ethernet packets along with header information. Packet size and buffering can be user selected or automatically controlled to minimize latency. The remote unit receives the Ethernet packets from the network and de-packetizes the PCM data. Using the statistics provided by the packetizer, the depacketizer reconstructs the original PCM data stream and coherent clock. Input PCM data streams may be independent in content and rate. Up to 12 Channels are provided in the 1U Chassis.

In a typical application, the inputs to the packetizer are received from PCM sources such as bit synchronizers connected to telemetry receivers. (Optionally, internal bit synchronizers are available.) The data is then transported over the network to a remote unit. The de-packetizer function in the remote unit reconstructs the output clock and PCM data which can be directly connected to a PCM frame synchronizer / decommutator. Alternatively, the data can be sent over the networks to a remote processing unit. Frame synchronization and packet alignment in the packetizer



www.gdpspace.com gdpinfo@gdpspace.com



SPACE SYSTEMS

Telemetry Gateway Six/Twelve Channel TM (PCM) over IP

Options

Digital Input Bit Synchronizer Option: This option recovers a clock from a digital data input for those applications where a synchronous clock is not available.

Frame Synchronizer Option: Frame synchronize to the incoming PCM format. Align the start of each minor frame to the start of a network packet. This feature supports simplified software decommutation directly from the Ethernet.

IRIG 106 Chapter 10 Compatible Output Option: The module can be optionally configured to output the PCM data onto Ethernet in Chapter 10 compatible packets (Packed mode or Throughput mode). These packets can then be decommutated, processed and displayed by a variety of standard Chapter 10 compatible software packages. Note that when used in Chapter 10 mode data can not be transported to a second 2350 for de-packetization. This mode is for software decommutation of the Chapter 10 data

Small Form Pluggable (SFP) Interface Option: Allows the user to select the appropriate fiber transceiver for the required optical reach over various fiber types. SFP modules may be provided by the user or contact GDP for module options.



Channel Model 2350A Data Link

Ordering Information

MD2350A-M06 MD2350A-M12 OP2350A-20 OP2350A-30 OP2350A-35 6 Channel TMoIP Unit (1U Chassis) 12 Channel TMoIP Unit (1U Chassis) Digital Input Bit Synchronizer Frame Synchronizer Chapter 10 Ethernet Output (PCM) OP2350A-60 OP2350A-61 OP2350A-80 OP2350A-90 IRIG Time Code Input/Output IRIG Time Code Input SFP Fiber Network Interface Redundant Power Supply

Recognizing that no standard product can meet all the needs of all users, GDP stands ready to provide units tailored to unique applications.
The statements in this data sheet are not intended to create any warranty, expressed or implied. Specifications are subject to change without notice.