

Model 2350/2351

Telemetry Gateway Dual/Quad Channel TM (PCM) over IP

Features

- Dual/Quad Channel Configurations
- Programmable Transmit / Receive
- Dual Channel PCM Module
 - TTL/RS-422 Data & Clock
 - Auto Rate Tracking
 - Up to 40 Mbps
 - 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 218-10 Compatible*
 - IRIG 106 Chapter 10/11 Compatible Enet Output*
 - Throughput and Packed Modes
 - IRIG 106 Chapter 7 Serial Back to Enet Output*
- Very Low Latency—Less than 10ms at all data rates
- Integrated BERT for link testing and latency analysis
- Signal Activity Indicators
- Independent Packetizer and De-Packetizer
- User Interface
 - HTTP / Web Browser
 - Command Line & SNMP*
 - IPV4/IPV6*
- Best Source Selection*
- Redundant Power Supply*
- Table Top or Rack Mount Package

*Optional Feature

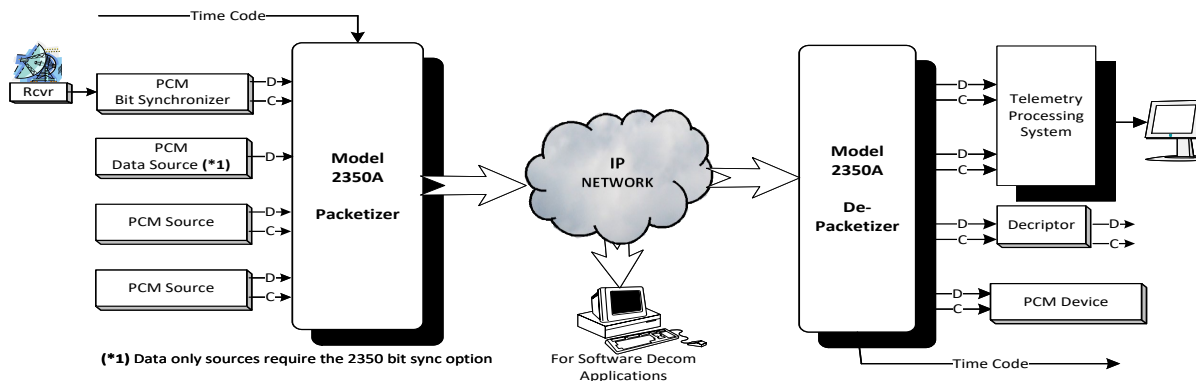
General Description

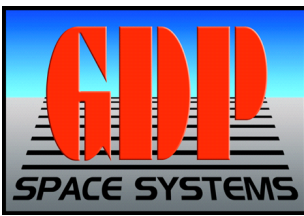


The **Model 2350 Telemetry Gateway** provides the necessary signal processing to pass telemetry data either to or from an Ethernet network. User programmability permits the unit to function as a **Telemetry-to-Ethernet** converter (packetizer) or as an **Ethernet-to-Telemetry** converter (de-packetizer). The Model 2350 is a rack mount unit and accommodates one or two modules. The Model 2351 is a table-top unit that accommodates a single module. Modules can be mixed and matched as needed. Each channel on a module is individually configurable as either a packetizer or a de-packetizer.

The **Dual Channel PCM Module** accepts up to two (2) 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 de-packetizer reconstructs the original PCM data stream and coherent clock. Input PCM data streams may be independent in content and rate. Up to 2 Dual Channel Modules is a 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 simplify processing by a downstream software decommutator.





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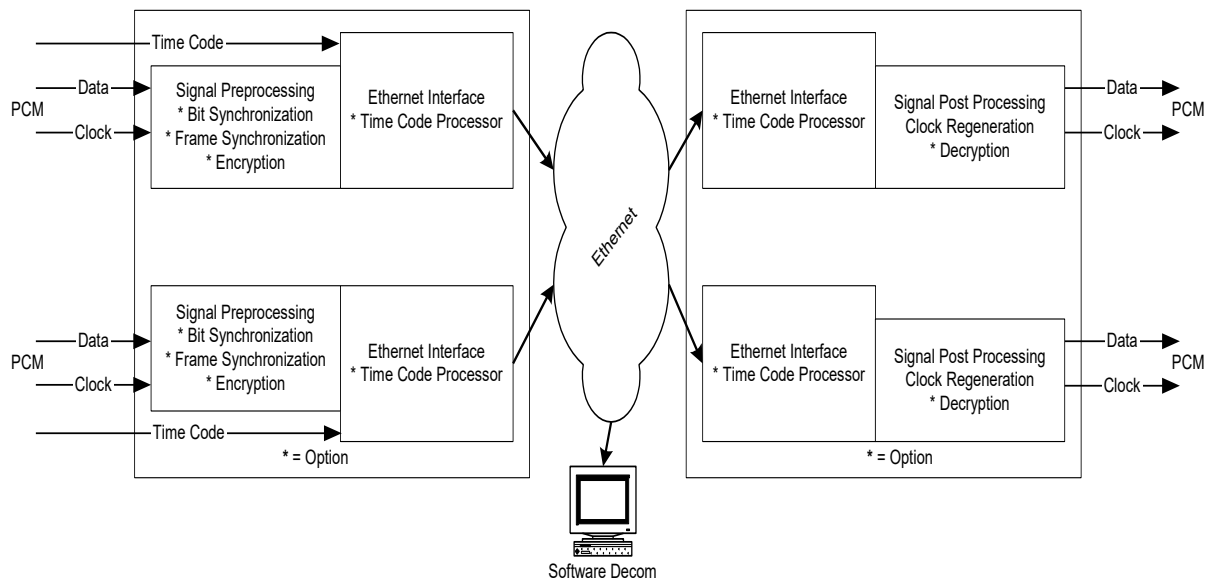
Options

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 accept PCM data and output this PCM data onto Ethernet in Chapter 10 compatible packets. Both Packed and Throughput modes are supported. These packets can then be decommutated, processed and displayed by a variety of standard Chapter 10 compatible software packages.

IRIG 106 Serial Chapter 7 Back to Ethernet Option: The module can be optionally configured to accept Chapter 7 synchronous serial data and convert them back to Ethernet packets.



2-Dual Channel Model 2350 Data Link

Ordering Information

MD2350-M02	Dual Channel TMoIP Unit (1U Chassis)	OP2350-60	IRIG Time Code Input/Output
MD2350-M04	Quad Channel TMoIP Unit (1U Chassis)	OP2350-61	IRIG Time Code Input
MD2351-M02	Dual Channel Table-top Enclosure	OP2350-80	SFP Fiber Network Interface
OP2350-20	Digital Input Bit Synchronizer	OP2350-90	Redundant Power Supply
OP2350-30	Frame Synchronizer		
OP2350-35	Chapter 10 Ethernet Output (PCM)		
OP2350-36	Chapter 7 Serial Back to Ethernet Output		
OP2350-40	Dual PCM Input/ Output Module		

* Recognizing that no standard product can meet all the needs of all users, GDP stands ready to provide units tailored to unique applications.
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