

# Next Gen Telemetry Gateway

MODEL 2355



## KEY FEATURES

UP to 16 channels at Sustained Bit Rates from 100 bps to greater than 50Mbps

Available in 16, 12, 8, 4 Channel Configurations

Low Latency & Low Channel-to-Channel Skew

New Easy-to-use Web Browser GUI with Enhanced Channel Status and Error Reporting

Frame Sync/Pattern Detector for each CH Supporting Frame Aligned and Non-Frame Aligned Modes

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

Time Input / Output / Packet Tagging  
NTP & PTP IEEE-1588 (Standard)  
IRIG B STD 200 \*

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 10/11 \* & AE Format\*

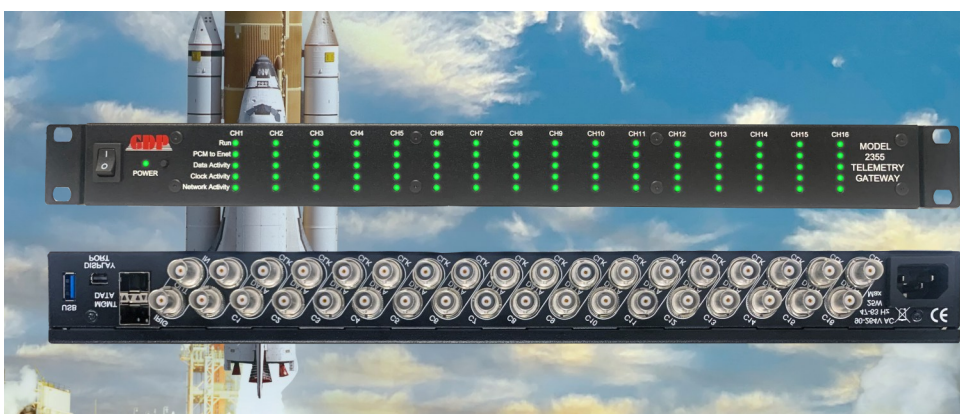
\* Optional

## GENERAL DESCRIPTION

The Next Generation Model 2355 Telemetry Gateway is the latest in Telemetry-over-IP transport. The unit supports PCM-to- Ethernet packetization and Ethernet-to-PCM depacketization and is controlled by utilizing our New Web based Browser GUI. The MD2355 is a 1U rack mount gateway available in 16, 12, 8 & 4 channel configurations that facilitate the transfer of data, which can originate from a variety of sources over an Ethernet network. The basic input is a synchronous serial digital data stream and its coherent clock. This serial data source is packetized, placed in an Ethernet wrapper and output to a network environment. A second model MD2355 gateways can be connected to the network to receive and extract the original data from the Ethernet packets. This reconstructed data stream is output with a coherent clock at the same data rate as the original source. The unit supports a variety of ethernet formats including IREG 218-2010 & 2020, GDP Formats, Optional Chapter 10/11 format and others. Packet tagging and time transport via NTP and PTP come standard. IRIG B is optional. This compact high-density transport solution will bring down the per/ channel costs while increasing the system mean time between failures (MTBF).

An internal frame synchronizer is provided for each channel supports pattern sync to the incoming PCM stream. In addition to pattern sync status, the Frame Sync can align the start of each minor frame to the start of a network packet. This feature supports simplified software decommutation directly from the Ethernet.

Independent Control and data ports are supported via SFPs. Copper SFPs are provided standard. Fiber SFPs are also supported.



## RELATED PRODUCTS

Receivers	Best Source Selector	Ethernet Recorder	Telemetry Data Processor

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## MODEL 2355

### TECHNICAL SPECIFICATIONS

Box Certifications:	CE Mark Certified
Box Configurations:	Available in 4, 8, 12 & 16 Channel configurations.
Data I/O:	TTL Data & Clock I/O Cards- up to 16-Channels in groups of two (Dual Channel Card); each independently user programmable as an input or output channel. The unit comes standard with all TTL Dual Channel I/O cards. Additional card types below can be optionally substituted in groups of two.  OR - Optional Dual Channel RS-422 Data & Clock I/O card- up to 16-Channels in groups of two; each independently user programmable as an input or output channel.  OR - Optional Dual Channel Digital Input Bit Sync Card (TTL or RS-422 Data & Clock) - up to 16-Channels in groups of two; each independently user programmable as an input or output.
Termination:	TTL Input termination - program selectable 50Ω or 75Ω RS-422 Input termination- program selectable to 120 Ω
Serial Clock/Data Rate:	100 bps to 50 Mbps per channel
Network Interfaces:	Ethernet 10/100/1000-T - IPv4 (IPv6 Optional)
Network Address:	Static
Management Interface:	SFP Connector TCP/IP
Data Interfaces:	SFP Connector UDP/IP BNC TTL Data/Clock; LENO Connector Data & Clock for RS-422 (Option); RS-422 I/O modules can replace TTL I/O modules.
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 (Option) AE* Format (Option)
Data Transport Latency:	Typical 10 ms adjustable – Measured Serial Input to Serial Output with units connected back-to-back. (Data Rate greater than or equal to 1 Mbps).
Time I/O: (Option)	IRIG-B120* (A/B), 1 input, 1 output
Time Stamp:	NTP/PTP (Standard), IRIG A/B* (Optional)
Time Input:	Standard 19 inch 1U Rackmount Chassis, 20.6 inches deep; 1.75" (42.8mm) H x 17.1" (434mm) W x 20.6" (523mm) D
Time Output:	NTP/PTP (Standard), IRIG A/B* (Optional)
Power Input:	115 to 220 VAC ±15% Auto Sensing. 47 to 63 Hz; <25 Watts
Operating Temperature:	Operating: 0° C to +45° C Storage: -40° C to +70° C
Relative Humidity:	Non Condensing up to 95% RH
Altitude:	0 to 10,000 feet Above Sea level
Size:	1.75-inches (H) x 19-inches (W) x 12.25-inches (D)
Mounting:	Standard 19-inch EIA rackmount (Model 2355)
Weight:	11 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.*

