



TMoIP PROCESSOR



The Quasonix TMoIP Processor (QTP) core provides IRIG 218-20 compliant telemetry transport in both a 12-channel 1U form factor (TMOIP-12) and a 3-channel integrated solution embedded in a 1U or 3U RDMS receiver (RDMS with the IP2 option). Both form factors provide accurate, reliable transport of all received telemetry data streams from receivers to the range network, while offering a multitude of features. The 3-channel solution differs in the number of channels and that it is PCM IN only (packetizes telemetry data).

1U and 3U RDMS are factory upgradable to add 3-channel TMoIP capability (IP2 option).

Contact sales@quasonix.com for details!

PCM Telemetry Interface

- **Stand Alone: 6 or 12 Channel; Integrated: 3 Channels**
1U standalone processor supports 6 or 12 channels of PCM input/output (field upgradeable from 6 to 12); RDMS integrated solution supports 3 channels of PCM input, one each for Channel 1, Channel 2, and Combiner
- **PCM Telemetry Clock and Data Rates of 100 kbps to 46 Mbps Per Channel**
Each channel supports an independent clock rate; bit rate detected automatically—no configuration needed
- **Bidirectional**
To provide maximum flexibility, each channel can serve as a PCM input or output (TMOIP-12 only)
- **Electrical Interface via TTL or RS-422**
Clock and data for each channel can be configured for TTL via 75 ohm BNC, or for RS-422 via MDM-25 connectors
- **Configurable TX/RX Clock and Data Polarity with Auto Clock Edge Detection**
Clocking edge can be automatically determined via relationship with data (most reliable edge is selected)

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Network Interface

- **Two 1000 Base-T Gigabit Ethernet RJ45 Ports**
Separate ports for configuration and data
- **IRIG 218-20 Packet Format**
Support for the latest standard with first bit timestamping
- **Per Channel Configuration**
Each channel is independently configurable for maximum flexibility
- **Configurable DQE Frame Alignment**
TMOIP packet starts with a DQE frame and contains its full payload

User Interface

- **Local and Remote Management for Configuration and Monitoring**
Front Panel LCD and LEDs for Health and Status;
Web Browser Based UI for Command, Control, Health, and Status
- **BER Test Mode with Generator and Analyzer**
Allows full testing of system configuration and cabling prior to mission start
- **Easy Field Updates**
Software updates may be installed by the customer on-site



Specifications

Environmental Section

Operating Temperature	0°C to +50°C
Storage Temperature	-20°C to +70°C
Operating Humidity	0 to 95% (non-condensing)
Altitude	Up to 30,000 ft.

Physical Section

Size	1U rack-mount chassis: 18.95" wide, 1.72" tall, 14.00" rack depth, 14.45" overall depth
Weight	7.4 lbs.
Power	100 to 240 VAC, 50/60 Hz

TMOIP-12 Back Panel

