

QUANTERRA



A New Performance Standard

The Q330 is an advanced 3 or 6 channel broad-band, high resolution seismic system incorporating Quanterra's proven IP networking technology into a very low-power field package. The Q330 uses Quanterra's exclusive patented (US Patent 4866442, Japan Patent 2787445, others pending) ultralow-power delta-sigma 24-bit A/D with DSP, 32MB RAM, GPS receiver, power management, sensor command/control, and an advanced telemetry application for reliable data delivery.

Streamlined Remote Administration

The Q330 supports real-time data telemetry to a central site or connection via hard-wire or radio (burst or continuous) to a local low-power recording system, or both simultaneously.

Q330

VERY LOW-POWER HIGH-RESOLUTION NETWORK-AWARE SEISMIC SYSTEM

FEATURES

Low Power

Incorporating the latest low-power technology, the Q330 achieves integrated capability with an average power requirement of ~0.5 Watts, including recorder & GPS!

Internet-Ready Industry Standards

The telemetry protocol use industry standard stateless IP communications, enabling the use of off-the-shelf IP equipment and service providers. Serial IP and Ethernet 10BaseT are built-in.

Comprehensive Sensor Control

The Q330 is a seismological instrument, not a digitizer alone. Sensor control interface, including calibration, and sensor identification-tag support is built in.

SPECIFICATIONS

Channels	Standard 6-channel Q330-6
Auxiliary Channels (Opt.)	4/8 DI/SE 16-bit 1sps. Full scale range $\pm 50V$
Dynamic Range	132-135 dB wideband RMS typical. Typical band-limited 136 dB
Format	32-bit integer, Level 2 compressed 1-second packets
Input Range	40V P-P at gain=1
Gain	Selectable per channel: 1,30
Filtering	Linear or Minimum Phase FIR.

Sample Rate	200, 100, 50, 40, 20, 10, 1 Other rates available.
Time Base	Precision TCXO, locked to GPS. No adjustment.
DSP/CPU	ADSP-2189M
Telemetry	Full Duplex, efficient positive acknowledge with error control. UDP/IP over serial and Ethernet. Burst or continuous. Operates with major application software.
Temperature	Fully specified -20 to +50° C Operative -40 to +70° C

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Sensor Control	Calibrate step, sine, or random. Recenter, on-command
Operational Data	Temperature, DC voltage, GPS status, Sensor boom position (6 channels)
Memory	32MB RAM standard
Network	IEEE 802.10Base-T Ethernet UDP/IP Protocol Stack
Serial Ports	2 serial telemetry and 1 console ports up to 115kbaud.
Wireless	IrDA interface supported.
Power	<0.6 W avg. 12VDC 3-channel <0.8 W avg. 12VDC 6-channel
Physical	Sealed, Aluminum, 14 X 4 X 6 in., 8 lbs., Rubber endcaps, visible status and fault indicators.