QUANTERRA

A Division of Kinemetrics

Q330

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

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.





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.

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SPECIFICATIONS -

Channels Standard 6-channel Q330-6 bandwidth-

optimized 32-bit and 64-bit data paths

Auxiliary Channels (Opt.) 4/8 DI/SE 16-bit 1sps.

Full scale range ±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

Sensor Control Calibrate step, sine, or random.

Recenter, on-command

Operational Data Temperature, DC voltage, GPS status, Sensor

boom position (6 channnels)

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.