

QUANTERRA



Q330HR

ULTRA-HIGH-RESOLUTION NETWORK-AWARE SEISMIC SYSTEM

A New Performance Standard

The Q330HR sets a new performance standard in seismological instrumentation, building upon the widely praised ultra-low-power Q330. The Q330HR breaks the 24-bit performance barrier to extend the capability of advanced instrumentation for research. The Q330HR remains 100% compatible with our Q330. See [Q330 data sheet for a general and functional product description](#).

FEATURES

- Multiple Network Access for Telemetry and Local Recording
- Internet-Ready Industry Standards
- Comprehensive Sensor Control
- Streamlined Remote Administration

SPECIFICATIONS

Main Channels	3 channels 26-bit and 3 channels 24-bit; option for all 6 channels 26-bit available
Auxiliary Channels	4/8 DI/SE 16-bit 1 sps. Full scale range +50V
Dynamic Range	144-145 dB wideband rms typical
HR Channels	0.02-20Hz 147-148 dB
Input Range	40V P-P at gain=1
Gain	Selectable per channel: 1,20
Filtering	Linear or Minimum Phase FIR.
Sample Rates	200, 100, 50, 40, 20, 10, 1. Independently available any channel.
Time Base	Precision TCXO, phase locked to GPS. No adjustment.

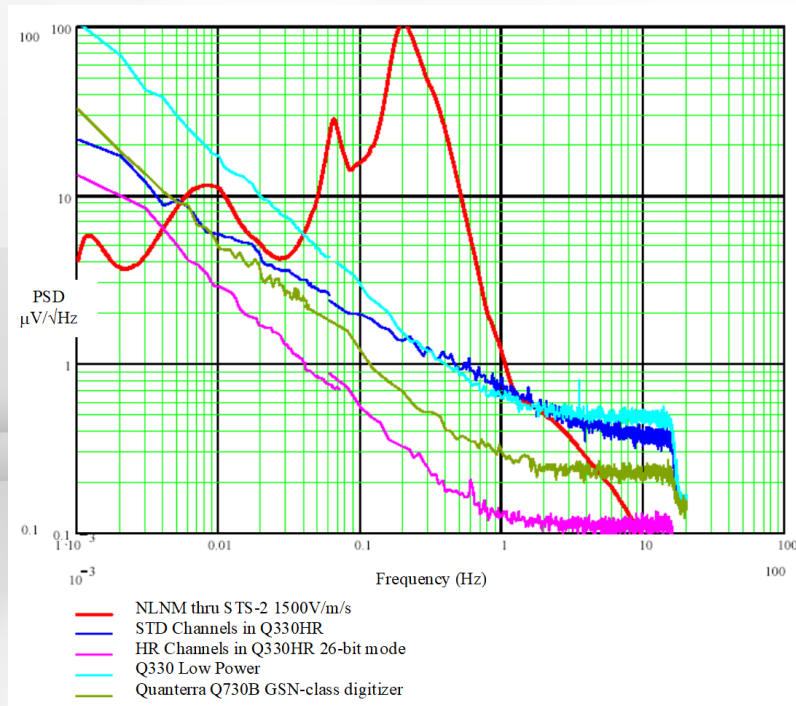
DSP/CPU	ADSP-2189M
Telemetry	Full Duplex, efficient positive acknowledge with advanced error control. Industry-standard IP over serial and Ethernet interfaces. Burst or continuous.
Multiple Access	4 Independent Data Ports. 2 Administration Ports
Format and Protocol	32-bit integer, Level 2 compressed 1-second packets. Published protocols operate with numerous major application software packages.
Temperature	Fully specified -10 to +50° C Operative -40 to +70° C

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Sensor Control	Calibrate step, sine, or random. Recenter, on-command	Serial Network	2 serial network and 1 console interface up to 115 kbaud.
Additional State-of-Health	Temperature, DC voltage, GPS status, Sensor boom position (6 channels)	Wireless	IrDA interface supported.
Memory	8MB RAM standard	Power	<2.0 W avg, 12VDC 3-channels on <2.5 W avg, 12VDC 6-channels on
Ethernet Network	IEEE 802 10Base-T Ethernet	Physical	Sealed, Aluminum, 14x4x6 in., 8lbs., rubber endcaps, externally visible status and fault indicators.

High! Resolution



The Q330HR sets a new standard, requiring 26-bit resolution to fully represent its dynamic range. The 'HR exceeds GSN-class standard set by Quanterra nearly 20 years ago. The figure above shows the performance of the HR and standard channels in the Q330HR compared with the ultra-low-power Q330 and Quanterra's GSN-class Q730B. Better by a bit and at very low power!