

QUANTERRA Q330HR

ULTRA-HIGH-RESOLUTION NETWORK-AWARE SEISMIC SYSTEM



A New Performance Standard

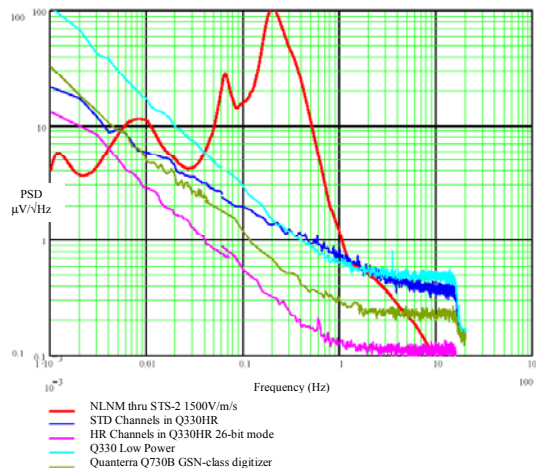
The Q330HR sets a new performance standard in seismological instrumentation, building upon the widely praised ultra-low-power Q330. The Q330HR breaks the 24-bit performance barrier to extend the capability of advanced instrumentation for research. The Q330HR remains 100% compatible with our Q330. [See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

Same Exceptional Features as Q330

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

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!

Specification	Description
Main Channels	Six: 3 HR 26-bit & 3 standard 24-bit
Auxiliary Channels	4/8 DI/SE 16-bit 1sps. Full scale range $\pm 50V$
Dynamic Range HR channels	144-145 dB wideband rms typical Typical 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.
Multiplex 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 +50C Operative -40 to +70C
Sensor Control	Calibrate step, sine, or random. Recenter, on-command
Additional State-of-Health	Temperature, DC voltage, GPS status, Sensor boom position (6 chan)
Memory	8Mb RAM standard
Ethernet Network	IEEE 802 10Base-T Ethernet
Serial Network	2 serial network and 1 console interface up to 115 kbaud.
Wireless	IrDA interface supported.
Power	<2.0 W avg. 12VDC 3-channels on <2.5 W avg. 12VDC 6-channels on
Physical	Sealed, Aluminum, 14x4x6 in., 8 lbs., rubber endcaps, externally visible status and fault indicators.

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PRELIMINARY SPECIFICATIONS, SUBJECT TO CHANGE

Rev B.