

# QUANTERRA Q330HR

## ULTRA-HIGH-RESOLUTION NETWORK-AWARE SEISMIC SYSTEM



### A New Performance Standard

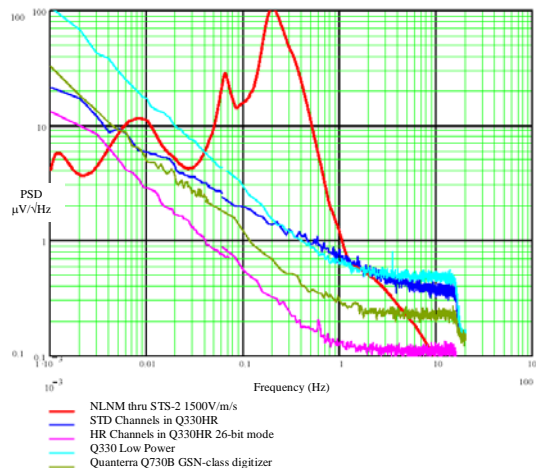
The Q330HR sets a new performance standard in seismological instrumentation, building upon the widely praised ultra-low-power Q330. The Q330HR breaks the 24-bit performance barrier to extend the capability of advanced instrumentation for research. The Q330HR remains 100% compatible with our Q330. [See 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 and at very-low-power!

Specification	Description
<b>Main Channels</b>	Six: 3 HR 26-bit & 3 standard 24-bit
<b>Auxiliary Channels</b>	4/8 DI/SE 16-bit 1sps. Full scale range $\pm 50V$
<b>Dynamic Range HR channels</b>	144-145 dB wideband rms typical Typical 0.02-20Hz 147-148 dB
<b>Input Range</b>	40V P-P at gain=1
<b>Gain</b>	Selectable per channel: 1,20
<b>Filtering</b>	Linear or Minimum Phase FIR.
<b>Sample Rates</b>	200, 100, 50, 40, 20, 10, 1. Independently available any channel.
<b>Time Base</b>	Precision TCXO, phase locked to GPS. No adjustment.
<b>DSP/CPU</b>	ADSP-2189M
<b>Telemetry</b>	Full Duplex, efficient positive acknowledge with advanced error control. Industry-standard IP over serial and Ethernet interfaces. Burst or continuous.
<b>Multiplex Access</b>	4 Independent Data Ports. 2 Administration Ports.
<b>Format and Protocol</b>	32-bit integer, Level 2 compressed 1-second packets. Published protocols operate with numerous major application software packages.
<b>Temperature</b>	Fully specified -10 to +50C Operative -40 to +70C
<b>Sensor Control</b>	Calibrate step, sine, or random. Recenter, on-command
<b>Additional State-of-Health</b>	Temperature, DC voltage, GPS status, Sensor boom position (6 chan)
<b>Memory</b>	8Mb RAM standard
<b>Ethernet Network</b>	IEEE 802 10Base-T Ethernet
<b>Serial Network</b>	2 serial network and 1 console interface up to 115 kbaud.
<b>Wireless</b>	IrDA interface supported.
<b>Power</b>	<2.0 W avg. 12VDC 3-channels on <2.5 W avg. 12VDC 6-channels on
<b>Physical</b>	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.