

Accelerometer and Bottom Pressure Recorder

The RBR*concerto* APT is a combined triaxial quartz accelerometer and a bottom pressure recorder. Achieving 10ppb resolution and 0.01% accuracy make the RBR*concerto* APT recorder ideal for deep-sea early earthquake detection and tsunami monitoring, providing the most opportunity to save life and property. Designed for both autonomous installation or cabled observatories, it has equipment capabilities to a 20Hz strong - and weak-motion seismometer and tsunameter.

Features

- 240M readings internal storage
- High accuracy
- Long deployments
- Up to 20Hz sampling
- Extremely high resolution



The RBR*concerto* APT uses proven proprietary technology and Digiquartz® transducers to achieve 10ppb depth resolution with sub-second integration times. The short integration times consume less power during sampling resulting in significantly longer deployments between battery replacements. User selectable integration time for each reading means you can adjust the resolution to your measurement needs. Dataset export to Matlab®, Excel®, or text files make post processing with your own algorithms easy.



Accelerometer and Bottom Pressure Logger

Specifications

Physical

Power:	24Wh battery
Storage:	240M readings
External Power:	9V-18V
Communication:	USB TCP/IP socket over Ethernet
Clock accuracy:	±60 seconds per year autonomous NTP clock sync when available
Logger size:	~880mm x Ø60.3mm
Logger weight:	~2.7kg

Temperature

Range:	-2 to 45°C
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Pressure (Depth)

Range:	700/1400/2000/3000/4000/ 7000/10,000m (dbar)
Overpressure:	1.2 times rated pressure
Initial accuracy:	±0.01% FS (full scale)
Typical stability:	See Paroscientific specifications
Resolution:	10ppb full scale (1s integration)
Thermal sensitivity:	<0.0008% FS per °C
Hysteresis:	≤±0.01% FS
Repeatability:	≤±0.01% FS

Accelerometer

Range:	±3g
Resolution:	<100ng

