

GT-32 Data Sheet

The Georadis GT-32 (also sold as the RS230 in America) is a world leading portable hand-held gamma ray spectrometer for the geophysical industry. The instrument is designed around a 103cm³ Bismuth Germanate Oxide (BGO) detector.



The BGO detector is naturally denser than a Sodium Iodine (NaI) crystal of the same volume meaning count rates are significantly higher compared to its counterpart. Higher count rates are particularly important when characterising geological material through their Potassium (K), Uranium (U) and Thorium (Th) unstable isotope content.

The GT-32 offers three modes of operation; scan, spectra or assay. Scan mode is for general purpose operation and can be adopted for local level radiation identification, assessment of background radiation, classifying building material or locating concentrations of Radon gas. Recording spectra and assaying samples is more specific to identifying Rare Earth Elements (REMs), base line surveying and broader geophysical/geological research.

The instrument will automatically stabilise with reference to background radioactivity, and includes built in Bluetooth communications which permits the integration of geospatial positions via a GPS receiver.

Its rugged design and simple, one button, interface makes the GT-32 ideal for all field applications.

Product Dimensions

Physical	Dimensions (L x W x H)	Weight
(instrument only)	259mm x 81mm x 96mm	2.3kg

Technical Specifications

Operation Modes:	Scan, Survey and Assay modes.
Dynamic Range:	1024 channel spectra.
Detector:	103cm ³ Bismuth Germanate Oxide (BGO) detector.
Sensitivity:	K- 197 cpm/% U- 16 cpm/ppm Th- 8 cpm/ppm
Stabilising:	Auto Stabilising with reference to average background count.
Calibration:	Calibrated by the manufacturer prior to delivery. Calibration values are stored on internal solid state memory.
Environmental:	Temperature- -20°C to +50°C Water resistance: IP66 weather proofing. Short term water immersion protected and fully dust resistant.
Memory:	4MB
Communication:	Bluetooth enabled for Geospatial coordinate integration, or audio output to Bluetooth enabled headphones.
Data Download:	Via USB or Bluetooth.
Power:	Requires 4 rechargeable or alkaline AA batteries or 8 hours non stop operation.
Manufactures Warranty:	24 months

Gallery



Close-up of GT-32 screen. Image courtesy of Georadis.



The GT-32 can be supplied with a 2m Telescopic arm to aid analyse difficult to access dykes in rock outcrops.



GT-32 performing an assay on a rock outcrop.



GT-32 measuring natural Gamma count of a rock outcrop.