

# Gamma-Scout Data Sheet

Feature	Feature Details	Model Compatibility
Sensor Type	Halogen filled Geiger-Müller tube with mica end window [LND 712 or equivalent]	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Sensor End Window Density	End Window Density 1.5 – 2 mg/cm <sup>2</sup>	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Sensor Housing	Stainless-steel housing (0.012" wall thickness)	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Sensor Dimensions	Measuring Length 38.1mm, measuring diameter 9.1mm	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Sensor Zero Rate	Zero Rate < 10 pulses per min w/ 3 mm AL and 50 mm PB screening	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Operating Range	Calibrated scale 0.01 µSv/h up to 1000.00 µSv/h	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Gamma Sensitivity	1000 cpm/mR/hr or 108 pulses referenced to Co-60 radiation of 1 µSv/h ambient	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Minimal Alpha Detection	Detects alpha radiation from 4 MeV	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Minimal Beta Detection	Detects beta radiation from 0.2MeV	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Minimal Gamma Detection	Detects gamma radiation from 30 keV	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Memory	Internal storage for 32,000 data points	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Operating Temp. and Humidity	-40 to +75°C, up to 90% humidity	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Dimensions and Weight	L 6.5" (165mm), W 2.8" (72mm), H 1.2" (30mm). 6 ounces (130 grms)	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Casing	Impact-resistant Novadur	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Display	Real time LCD display, 4 digit numeric with operating mode indicators. Logarithmic bar chart.	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Calibration	Each unit is subjected to a final test supervised by the Institute of Radiation Protection, a government (German) controlled university for Applied Technology. The tested device must be in a confidence range of 5% in comparison to a master. This master is adjusted to a gauged reference Cs-137 emitter. Each unit gets a serialized test certificate.	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Selective Shielding	Shield the sensor's mica window from alpha (to allow beta and gamma only) or from alpha and beta (to allow gamma only).	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Power Consumption	Power circuit consumes less than 10 microamperes at environmental radiation.	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Dose Rate Units	Can be set to display units in Sievert or Rem	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Cumulative Dose	Can be set to sum up dose measurements to give the cumulative dose reading from some point in time.	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Data Download	Connects to Windows PC for a batch data download of archived data measurements in memory. Memory can be wiped clean for a fresh start of data archiving.	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
"Always On" Feature	Monitors radiation continually for a comprehensive and accurate data archive in memory that is downloadable. The unit cannot be turned off.	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Ticker and Programmable Alert	Audible alert ticker can be turned on and clicks with each pulse generated by the GM tube in the presence of radiation. A programmable alert can be set to sound by the unit on crossing a dose rate threshold.	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Embedded Battery	Embedded (soldered on) Lithium Thionyl Chloride battery, with a typical 10 year operating life at average 20°C and normal usage. There is no need to recharge this battery through its lifetime. To replace send back to factory for a replacement for a small fee.	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Rechargeable Battery	Can be charged via USB cable or external power supply (included)	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Real Time Data Download	Connects to Windows PC and sends the data measurements (pulses) in intervals of 2 seconds	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>
Certifications	Meets all European CE standards as well as US FCC 15 standard	<b>STD</b> <b>ALT</b> <b>RCH</b> <b>ONL</b>

Specifications as of May 2011. Specifications can change at any time.