ERDI LRF3000A1

Component datasheet · ERDI TECH LTD · laser rangefinder modules and eye-safe laser sources

Model	**LRF3000A1**
Family	905nm
Wavelength	905 ± 10 nm
Measuring range (with the condition it was measured under)	Minimum 1 m on a 90%-reflectivity whiteboard; maximum range ≥3000 m on a 70%-reflectivity building target — Clear weather; visibility ≥4 km
Accuracy / resolution	±0.7 m (D ≤ 100 m); ±(0.7 + 0.003D) m (D > 100 m) — Building target; D is distance in meters.
Update rate	Normal: 3-10 Hz; long-range: 1-10 Hz — Adaptive in both modes
Interface	UART, 3.3 V TTL
Supply	3.3-5 V DC — Ripple <0.1 V
Power	≤1.8 W at +25 °C; ≤1.6 W at -20 °C — +3.3 V input. These entries do not extend the operating-temperature range.
Mass	12 ± 0.5 g
Dimensions	—
Operating temperature	-20 °C to +60 °C Storage temperature -25 °C to +75 °C
Laser class	—
Pulse energy	—

How to read the range figure. A range number without its target size, reflectance and visibility is not comparable to anything. The figure above carries the manufacturer's own condition, quoted verbatim. If you need a different target or a different visibility, ask — the usable range changes, and we would rather state both than let you discover it in the field.

What is not in this sheet. Pinout, command frames and the protocol document are supplied with the units, matched to your firmware revision. We do not publish them here because frames differ between revisions and a generic frame does nothing on your bench.