ERDI LRF1831C

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

Model	**LRF1831C**
Family	1535nm
Wavelength	1535 ± 5 nm (source writes the tolerance as ±0.005 μm)
Measuring range (with the condition it was measured under)	Line of sight, visibility ≥15 km and relative humidity ≤80% at 30 °C: Target 1, 5 × 15 m, ≥6500 m (reflectance not stated); 20 × 20 m diffus
Accuracy / resolution	/ resolution ±2 m; range resolution ≤0.1 m
Update rate	0.5-10 Hz Beam divergence ≤1.3 mrad
Interface	Selectable TTL (3.3 V logic) or RS-422; confirm ordered variant
Supply	DC 12 V; verify the conflicting RS-422 connector labels before wiring
Power	Average ≤2 W; peak ≤3 W; standby ≤1.2 W; peak-power test condition not stated
Mass	≤410 g
Dimensions	TBC: specification table and introduction give 113 × 76 × 90 mm mechanical-figure caption gives 125 × 100 × 70 mm
Operating temperature	-40 to +70 °C; storage -55 to +75 °C
Laser class	—
Pulse energy	≥350 μJ

Source note. Figures pending confirmation against the manufacturer's current specification sheet.

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 We do not publish them here because frames differ between revisions and a generic frame does nothing on your bench.

ERDI TECH LTD · No.23 Chaoyang Road, Xihe Street, Longquanyi District, Chengdu 610107, China · specs@erdilrf.com · https://specs.erdilrf.com · figures transcribed from the manufacturer's published specification