SPD1200S2 · 905 NM

SPD INTEGRATION SERIES

SPD1200S2

LASER CLASS
CLASS 1
IEC 60825-1

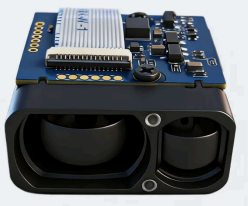
A ⩽ 10 g square-format module for easy mechanical integration: full-range 0.2–1,200 m (1,500 m at night) on a fast 4–15 Hz adaptive cadence, with a resin aspherical lens and IP67 lens cavity.

MAX RANGE	ACCURACY	WEIGHT	INTERFACE
0.2–1,200 m (1,500 m night)	**±0.3 m (⩽400 m)**	**⩽ 10 g**	**UART-TTL**

TECHNICAL SPECIFICATIONS

FULL SHEET

Laser wavelength	905 nm ± 5 nm
Laser divergence	< 6 mrad
Optical material	Resin aspherical lens
Receiving aperture	9.0 × 14.5 mm
Ranging range	0.2–1,200 m (max 1,500 m nighttime)
Ranging accuracy	±0.3 m (⩽400 m) · ±0.5 m + d·0.1% (400–1,200 m)
Ranging frequency	4–15 Hz adaptive
Accuracy rate	⩾ 98%
Interface	UART-TTL (customizable)
Baud rate	115200 bps
Supply voltage	3.3–5 V
Startup time	⩽ 200 ms
Operating power	≈ 0.5 W average · 0.75 W max
Operating temperature	-20 to +60 ℃
Storage temperature	-40 to +60 ℃
Protection rating	IP67 (lens cavity)
Laser safety class	IEC Class 1
Dimensions	24.6 × 14.45 × 26.3 mm (square)
Weight	⩽ 10 g



INTERFACE

UART-TTL

PIN	SIGNAL	DESCRIPTION
1	GND	Power –
2	VCC	Power +
3	I/O	Reserved for expansion
4	TXD	Module → host
5	RXD	Host → module
6	SW-SHOT	Function enable (active high)

APPLICATION FIT

INTELLIGENT INTEGRATION · INDOOR & OUTDOOR SENSING · INDUSTRIAL MEASUREMENT

Standard 8-byte UART frame (0x55 0xAA header, function code, 4 data bytes, checksum); distance returned ×10 for a one-decimal reading. Full integration manual ships with samples.

ERDI TECH LTD — 905 nm eye-safe laser rangefinder modules (IEC 60825-1 Class 1)
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