

1535nm LASER RANGEFINDER

Model: LRF1003

OVERVIEW

The pulse laser rangefinder module integrates laser, transmitting and receiving optical components, along with advanced control circuitry. This type of laser rangefinder operates within an electrooptical pod system, detecting target distances and transmitting precise measurement results to the host through serial communication. This functionality forms the foundation for its use in firearm sighting laser rangefinders, ensuring accuracy and reliability in target acquisition. Open-frame OEM modules and various configurations of Line-Replaceable Units (LRUs) are available, enhancing the versatility and adaptability of this pulse laser rangefinder module.



Project	Technical Parameters
Laser wavelength	1535±5nm
Distance measuring capability	Visibility of not less than 5km, diffuse reflectance ≥ 0.3 , humidity $\leq 80\%$, the vehicle (2.3m × 2.3m target) range of ≥ 3 km; personnel (1.75m × 0.75m target) range of ≥ 1.5 km
Distance measuring function	Single and continuous ranging
	Distance selection pass, front and rear target indication
	Self-check function
Ranging accuracy	$\leq \pm 2$ m (RMS)
Continuous ranging frequency	1~10hz adjustable
Quasi-measurement rate	$\geq 98\%$
Minimum measurement range	≤ 20 m
Distance measurement resolution	≤ 30 m
Laser divergence angle	≤ 0.5 mrad
Communication interface	RS422
Supply voltage	DC3V~15V; (customizable)
Power	Average power consumption ≤ 1.5 W (1Hz work), peak power consumption ≤ 5 W
Dimension	≤ 50 mm×37mm×24m
Weight	≤ 50 g
Operating temperature	-40°C~+65°C
Storage temperature	55°C~+70°C