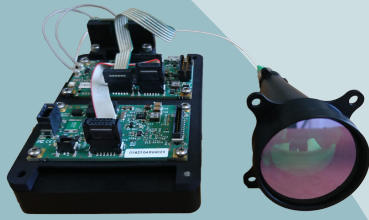




LRF 1550 SR+



DESCRIPTION

This new OEM Laser Rangefinder is meant as a solution for a big challenge: To meet the different "SWaP" (Size, Weight and Power) requirements of multi-function optronic solutions with the same system.

We report on a mono channel fully fibered Laser Rangefinder based on a patented one lens collimator technology used as the aperture of both the emission and reception channels.

Our very innovative design allows us to offer different system options to better fit the integrator's requirements: **a monobloc design or a modular kit configuration** with the opto-mechanical collimator on one side, the laser and detection module on the other side.

Both are just linked up by an optical fiber!

DATASHEET

Optical specifications / Performances

	Min.	Typ.	Max.	Units	Comments
Wavelength	-	1556	-	nm	
False alarm rate	-	-	1	%	
Measurement rate	1			Hz	Options in table "Range performance VS frequency and laser safety class"
Eye safety per IEC 60825-1	Class 1				
Detection range on beamfilling target	9,3	-	-	km	Beamfilling target ; 50% reflectivity ; 50km visibility
Detection range on NATO targets	6,3	-	-		2.3m x 2.3m target ; 30% reflectivity ; 20km visibility
Detection range on human target	4,5	-	-		1m x 1m target ; 10% reflectivity ; 10km visibility
Detection range	30	-	20 000	m	
Accuracy	-	-	0,5	m	+/- 2σ, measured @ 11km
Divergence	-	-	0,35	mrad	
Multiple targets	3			-	Distances to targets are transmitted in ascending order of distance
Target discrimination	-	30	-	m	Between echoes

Electrical specifications

	Min.	Typ.	Max.	Units	Comments
Communication interface	-	-	-	-	USB, RS232 or RS422
Operating mode	-	-	-	-	Sleep, Ready-to-fire, Firing
Measurement mode	-	-	-	-	Single shot & Continuous mode
Supply voltage	12	-	32	V	
Restitution duration	-	-	45	ms	Time between the end of laser firing and distance restitution
Consumption	-	0,05	-	W	Sleep mode
	-	5,5	-		Ready-to-fire mode
	-	6	-		

Environmental specifications

	Min.	Typ.	Max.	Units	Comments
Operating temperature range	-35	-	71	°C	
Storage temperature range	-40	-	85	°C	

Mechanical specifications

	Min.	Typ.	Max.	Units	Comments
Architecture	-	-	-	-	OEM
Dimensions (W x H x D)	41 x 143			mm	Collimator module with fiber connector and fiber radius of curvature of 25m
	74.5 x 45 x 119				Laser and detection module - connectors included
Weight	-	-	300	g	

Range performance VS frequency and laser safety class

Frequency	1	5	10	Hz	
Class 1 (*)					
Detection range on beamfilling target	9,3	6,6	5,6	km	
Not eyesafe - Class ≥ 3B (*)					
Detection range on beamfilling target	20	14,5	11,7	km	

(*) EN60825-1 v2014 standard

Note

1	By default, the LRF is delivered with a set and fixed measurement rate. Possibility to change the rate is provided as a option. Please specify at the time of order.
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