



## RANGER LR family

### OEM Long-Range Laser Range Finder

The RANGER LR an open-frame (single or dual section) or box module designed for OEM implementation as a long-range, single-pulse eye-safe laser range finder with an infra red target aiming laser (optional). These modules are some of the only LRFs in the world of these dimensions that enable continuous lasing at repetition rates of 1 Hz, 3 Hz or 10 Hz.

The RANGER LRs comply with the most rigorous customer requirements according to MIL-STD 810F. The RANGER LRs are designed for integration as part of a multi-sensor suite and/or UAV payloads. Smartly designed for maximum packaging flexibility, the RANGER LR is easily adapted to existing systems according to customer needs.

- Very short lasing time ideal for fire control and airborne applications.
- Easy multi-suite OEM integration.

- »» **RANGER 12** - Based on single-pulse Er:Glass laser, for ranges of 75 – 12,000 m
- »» **RANGER 25** - Based on single-pulse Er:Glass laser, for ranges of 75 – 25,000 m
- »» **RANGER 25 PLUS** - Based on single-pulse Er:Glass laser, for ranges of 75 – 25,000 m, at triple ranging repetition rate (3 Hz)
- »» **RANGER 30 High Repetition (HR)** - Unique 10 Hz repetition rate LRF based on single-pulse Er:Glass laser, for ranges of 75 – 30,000 m



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## Technical Characteristics

	RANGER 12	RANGER 25	RANGER 25 PLUS	RANGER 30-HR
<b>Laser type</b>	Er:Glass	Er:Glass	Er:Glass	Er:Glass
<b>Wavelength</b>	1540 nm	1540 nm	1540 nm	1540 nm
<b>Ranging Repetition Rate</b>	1 lasing operation/ sec (1Hz) – Continuous	1 lasing operation/ sec (1Hz) – Continuous	3 lasing operation/ sec (3Hz) – Continuous	10 lasing operation/ sec (10Hz) – Continuous
<b>Range Accuracy</b>	±3m (1σ)	±3m (1σ)	±3m (1σ)	±3m (1σ)
<b>Extinction Factor (500m)</b> – Lambertian target with R=85%	>37 dB	>42 dB	>42 dB	>44 dB
<b>Minimum Range</b>	75 m	75 m	75 m	75 m
<b>Maximum Range (Best Conditions)</b>	12,000 m	25,000 m	25,000 m	30,000 m
<b>Laser Safety</b>	Fully eye-safe - CLASS 1, IAW IEC 60825-1:2001-2008	Fully eye-safe - CLASS 1, IAW IEC 60825-1:2001-2008	Fully eye-safe - CLASS 1, IAW IEC 60825-1:2001-2008	Fully eye-safe - CLASS 1M, IAW IEC 60825-1:2001-2008
<b>Boresight between mechanical interface and laser</b>	<0.3 mrad	<0.3 mrad	<0.3 mrad	<0.3 mrad
<b>Electrical</b>				
<b>Power Source</b>	18-33VDC	18-33VDC	18-33VDC	18-33VDC
<b>Communication</b>	RS232 or RS422	RS232 or RS422	RS232 or RS422	RS232 or RS422
<b>IR Pointer (Optional)</b>				
<b>Output Power</b>	15-120 mW	15-120 mW	15-120 mW	15-120 mW
<b>Boresight Pointer/LRF</b>	<0.3 mRad	<0.3 mRad	<0.3 mRad	<0.3 mRad
<b>Physical Data</b>				
<b>Weight</b>	Open Frame Module: Dual-Section Open Frame Module: Box:		<0.7 Kg <0.6 Kg <1.2 Kg	
<b>Environmental</b>				
<b>Complies with MIL-STD-810F and MIL-STD-461D</b>				



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Specifications subject to change at any time

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The manufacturer has a policy of continuous improvement and reserves the right to make changes without prior notice (02/10)