

# HENSOLDT LP21C

## Eye-safe laser rangefinder

The LP21C is a compact, lightweight, eye-safe, high performance, accurate laser rangefinder utilising diode-pumped Er-Glass technology, providing exceptional reliability in extreme operating conditions and low cost of ownership.

It provides laser range finding capability in excess of 20 km, accurate within 3 meters, while operating at an eye-safe wavelength of 1535 nm.

### Applications

- Airborne observation systems
- Border surveillance
- Maritime surveillance systems
- Vehicle-mounted reconnaissance systems
- Land-based surveillance systems
- UAVs

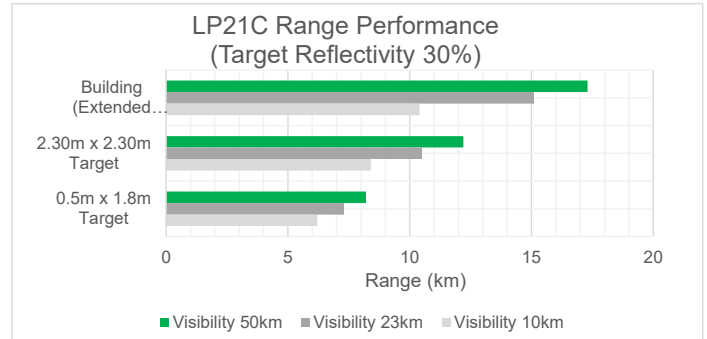
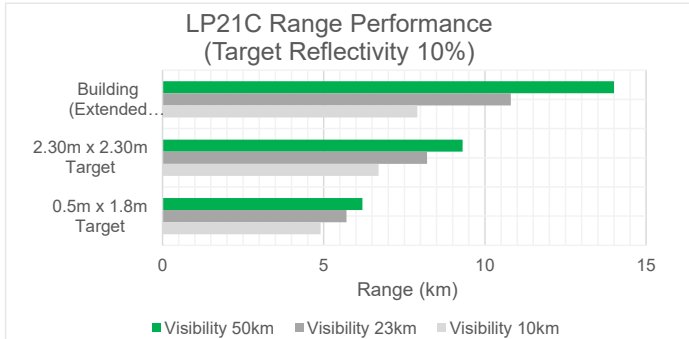


# LP21C

The LP21C is a self-contained unit consisting of the laser transmitter, a laser receiver as well as the power and control electronics needed to operate the laser rangefinder (LRF). Target ranges are determined by accurate measurement of the time of flight of a single laser pulse to the target and back. This technology provides superior performance in challenging atmospheric conditions.

Communication with the LRF is established by means of either an RS232 or an RS422 interface, which forms the LP21C's operational, status and maintenance functions. An LED projector facilitates alignment to a higher-level observation system.

The LP21C is not subjected to any EU or USA export controls.



## Key specifications<sup>1</sup>

<b>Range performance</b>	LRF extinction (TPG disabled) (to an extended target @ 500 m with a reflection of at least 85%)	40 dB		
	Measurement rate	Up to 2 Hz (1.8 Hz guaranteed)		
	Range resolution	1 m		
	Ranging accuracy	± 3 m (1 $\sigma$ )		
	Measurement range software limits	80 m - 30 000 m		
	False alarm rate	≤ 1%		
	Range logic	First, second and last target		
	Multiple target resolution	20 - 50 m depending on measurement conditions		
<b>Boresight LED projector</b>	Wavelength	635 nm		
	Divergence	1 mrad		
<b>General</b>	Laser wavelength	1535 nm		
	Laser safety	Class 1		
	Communications interface	RS232 and RS422		
	Mass	390 g		
	Size (l x w x h)	112 mm x 59 mm x 41 mm		
	Operational voltage	9 - 33 VDC		
	Power consumption	Standby mode	< 1.5 W	
		Average power consumption firing	< 5 W (maximum firing rate)	
<b>Environment</b>	Storage temperature	-45°C to +70°C <sup>2</sup>		
	Operating temperature	-40°C to +70°C <sup>2</sup>		
	Vibration	Random vibration to the following profile:		
		10 Hz - 300 Hz	0.02 g <sup>2</sup> /Hz	
		300 Hz - 2000 Hz	0.02 - 0.002 g <sup>2</sup> /Hz	
	Shock	40 g, 10 - 20 ms, Halfsine		
EMC	Tested to a selection of RTCA DO-160 requirements <sup>3</sup>			

Notes: 1 Subject to change without notice.

2 Due to the open-frame configuration of the LP21C, it should be used and stored in a dry, non-condensing atmosphere.

3 Due to the size and open-frame configuration of the LP21C, it offers limited shielding against radiated emissions or radiated susceptibility and limited protection against conducted emissions and conducted susceptibility. Measured data can be made available upon request.