

LAS



LAS consists of a transmitter that projects a 15 cm diameter pulsed infrared beam, and a receiver that analyses the modifications to the signal caused by the air in the path between them. The transmitter and receiver each have alignment telescopes and built-in pan and tilt adjustments. The durable design enables operation under almost any atmospheric condition and virtually without maintenance.

The analogue outputs are easily recorded by standard data acquisition and logging systems, making it ideal for implementation in existing measurement systems or networks. Transport and installation are simple and software for easy data processing is included.

LAS operates over path lengths from 250 m to 4.5 km. With the included aperture restrictions fitted the range is 100 m to 1 km.

Article	Part number
LAS Large Aperture Scintillometer	0357900

Specifications LAS

Path length / aperture diameter	100 m to 1 km / 10 cm 250 m to 4.5 km / 15 cm
Dimensions (LxWxH)	37 x 23 x 32 cm
Weight per transmitter/receiver	13.5 kg
Lens type	Fresnel
Wavelength	880 nm
Scintillation signal bandwidth	10 ⁻¹² to 10 ⁻¹⁷
Power supply	12 VDC 6 W / 35 W (with heater)
Pan and tilt adjustment	Built-in
Alignment telescopes	Factory adjusted
Software, Windows™	WINLAS for analysis and recorded LAS data (PC not included)

Accessories for LAS

Accessories for LAS	Part number
Transit Case For transmitter and receiver (one required for each) Foam-lined rugged transit case, for safe transport of LAS system	4483401
POWERBOX LAS For transmitter and receiver (one required for each) Weatherproof heavy-duty AC-DC power supply unit for outdoor use Wide AC input range, fully protected output 12 VDC at 3.5 A Operating temperature range -20 °C to +50 °C Pre-wired with 5 m cable and connector for LAS, 5 m AC power input cable and 10 m cable for LAS signal outputs	0357701
Tripod Floor Stand For transmitter and receiver (one required for each) For easy mounting and levelling of the LAS, height 0.45 m Very stable and rugged. As used with Kipp & Zonen Brewer and ZAP Tracker	0353710
Height Extension Tube Extends the tripod mounting height by 0.60 m to a total of 1.05 m	0353750
Adjustable Heavy-Duty Tripod Package Aluminium folding tripod, adjusts up to 3 m height, includes base-frame for hard surfaces and fixing bolts for LAS. Two supplied, one each for transmitter and receiver, in a convenient wood carrying case	0357703
<i>Note: These tripods are only suitable for short-term field use over relatively short path lengths.</i>	
Re-calibration Service and factory test, excluding any replacement parts needed	0357720
LAS Aperture Set 2 x 10 cm aperture restrictors for retro-fit to older LAS to give path length 100 m to 1000 m. As supplied with new LAS	0357704