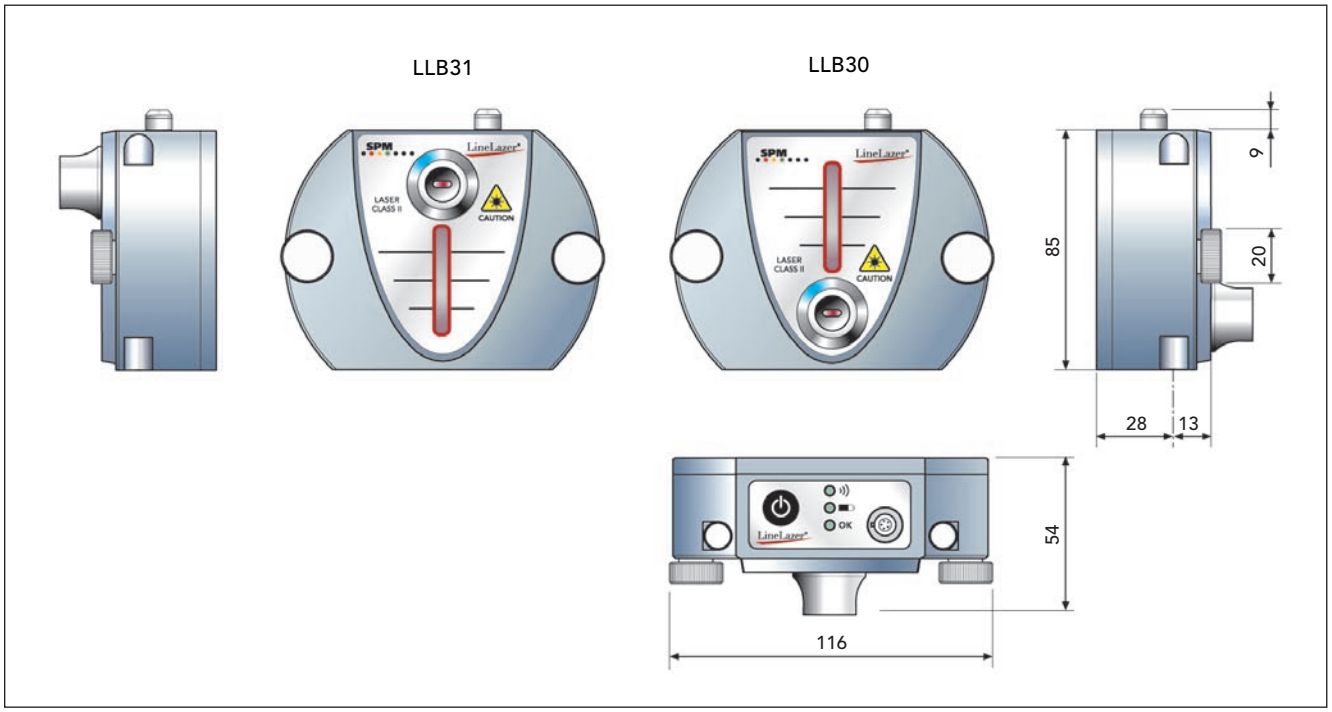
Leonova™ Infinity – LineLazer¤ detector units



LineLazer¤ LLB30 and LLB31 are two detector/transmitter units for shaft alignment with the multi-function datalogger Leonova™. The detectors are identical with exception of the position of laser diode and sensor.

Using a horizontally spread laser beam in combination with a 37 mm vertical sensor (PSD) makes fine tuning unnecessary. The laser beam is modulated and thus easily and automatically distinguished from interfering light sources. The laser beam is not mirrored, both units are true detectors/transmitters. The communication between them is wireless, only one of the units is cable connected to Leonova.

The detector units have integrated double axis precision inclinometers which measure the angle of rotation of both detector units at all times. This allows measurement in fully automatic mode, with much less than a half-turn of the shaft. Measurement results are displayed in 100ths of millimetres or 1000ths of an inch.

The control panel on the detector has a power off switch and LED indicators to show correct aim, battery status, and communication mode. The batteries are recharged with the standard Leonova Infinity chargers SPM 90362 (EU), 90379 (US) or 90380 (UK).

Technical specifications

Laser type:	line laser, visible red light
Laser power :	<1 mW
Laser safety class:	Class 2
Laser wavelength:	635 to 657 nm
Laser modulation:	200 kHz
Sensor resolution :	1 µm
Sensor linearity :	< 2% deviation
Sensor size :	37 x 1 mm (1.5 x 0.03 in)
Operating range :	50 to 3000 mm (2 to 120 in)
Inclinometer resolution :	0.5°
Batteries:	NiMH rechargable
Operating time :	> 16 hours normal use
Operating temperature:	0 to +50 °C (32 to 122 °F)
Storage temperature:	-25 to +55 °C (14 to 140 °F), non condensing
Keyboard:	sealed membrane
Control indicators:	LED, red/green
Connector type:	LEMO 5 pins, for communication with Leonova and battery charger
Housing:	aluminium, blue anodized
Protection:	IP65
Dimensions:	116 x 94 x 54 mm (4.6 x 3.7 x 2.1 in)
Weight:	450 g

Patent No.: US7301616, SE 0400586-4

SPM Instrument AB • Box 504 • SE-645 25 Strängnäs • Sweden
Tel +46 152 22500 • Fax +46 152 15075 • info@spminstrument.se • www.spminstrument.com