

SafeTest

LD Series

Technical Data Sheet



Maximise Safety



Eliminate Live Work



Wireless up to 100m (328ft)



Purpose Built for Heavy Industry



Overview

The SafeTest Laser Displacement Sensor enables completely wireless non-contact measurement of displacement. It removes technicians from the live work area, greatly reducing the risk of injury.

This rugged, non-contact laser displacement sensor is designed to achieve fast and accurate measurements in the harshest mining environment. It has a larger measurement span than the SafeTest Dial Indicator, and has a small form factor which allows measurements to be taken in tight spaces.

Use the Wireless MultiTool or the Multitool Pro to capture multiple displacement measurements at the same time.

Applications

- Slew deflection checks
- Diagnostics and fault finding
- Measure part wear and tear

Capability

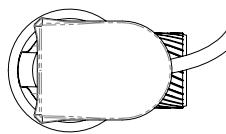
- Measures displacement with a measurement span of 30mm (1.18in), between 35mm (1.38in) and 65mm (2.56in) from laser aperture.
- Measurement accuracy of 0.1mm / 0.0039 inch
- Up to 100m (328ft) Bluetooth Range
- Rugged IP67 design
- Visible class 2 red laser
- Supplied with ball head magnetic base
- Compatible with Dial Indicator Mag Base

Specifications:

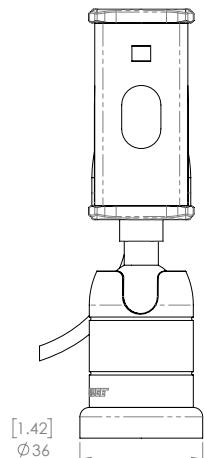
Electrical	
Power connector	DC jack 5.5mm (0.22in) x 2.1mm (0.08in) - 18V
Battery technology	Nickel Metal Hydride
Battery life cycle	1,000 charging cycles
Charging	To be charged by SafeGauge charging case only
Operating time	Up to 6 hours
Charging time	4 hours
Mechanical	
Dimensions	Communications box: L 100mm (3.94in) x W 75mm (2.95in) x H 34mm (1.34in) Laser with supplied magbase: L 48mm (1.89in) x W 29mm (1.14in) x H 120mm (4.72in) Cable: 300mm (11.81in) long
Weight	540g (19.05oz) with magnetic mounting base
Housing material	Communication box: ABS plastic Laser Enclosure: Aluminium Front cover: Polycarbonate
Ingress protection	IP67
Mounting	Laser enclosure has both M6 x 1 and 1/4 - 20 thread types for versatile mounting options. Supplied as standard with swivel ball head, utilising 1/4 - 20 thread
Operating range	35mm (1.38in) to 65mm (2.58in) from target (30mm (1.18in) span)
Visible red laser specifications	Laser Wavelength: 650nm Laser Diode Life: 8,000 operating hours MTBF Classification: Class 2 (Per IEC 60825-1:2014) This product complies with IEC 60825-1 Ed. 3 and 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No 50 of June 2007
Accuracy	0.1mm (0.0039in)
Sensor operating temperature	-10 to 45°C (14-113°F)
Sensor charging temperature	0 to 45°C (32-113°F)
Communication	
Communication type	Bluetooth Low Energy 2.4GHz
Maximum range	100m (328ft)
Sample rate	8Hz
LED system	Power LED flashes blue when searching to connect, and green when connected Laser LED is solid red when laser is on but out of measurement span, solid yellow when on the edge of measurement span and solid green when in the optimal measurement span.
Button system	During charging: Buttons have no function Outside charging: Power button turns device on/off Laser button turns laser on/off
Environmental	
Battery disposal	When finished with a SafeGauge product please return to SafeGauge Pty Ltd for correct recycling, or follow your local area laws and guidelines for correct battery disposal.

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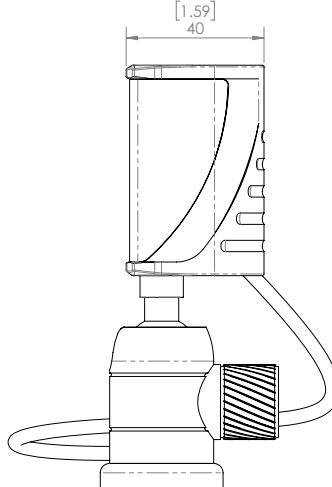
Dimensions



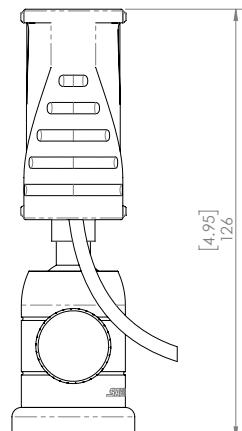
TOP VIEW



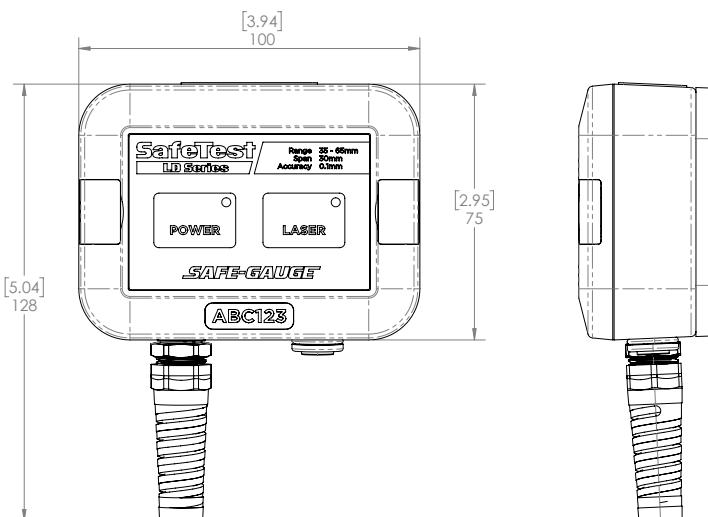
FRONT VIEW



RIGHT VIEW



BACK VIEW

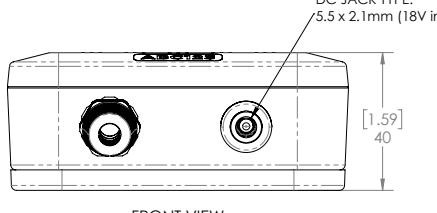


TOP VIEW

RIGHT VIEW



BOTTOM VIEW



FRONT VIEW

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