



# Laser Height and Stagger Gauge (P8100) /

Track Control Solutions



The Laser Height and Stagger Gauge (P8100) uses laser technology to enable the user to take measurements of the height and stagger of overhead catenary wire (OHL) quickly and accurately, from a standing position. Super elevation (SE) and rail edge to face of structure (REFOS) can also be measured.

The P8100 Laser Height and Stagger Gauge is an evolution of the P4640 model. The new design allows the user to read the stagger reference from the real gauge.

The folding, robust and lightweight tool is manufactured from hardwearing, non-conductive GRP and offers a sprung foot to improve user-friendliness, repeatability and accuracy of measurement. Hilti's PD-E laser range meter is used for height measurements, while stagger readings are displayed on an easy-to-read scale on the top of the gauge body. Cant readings are displayed digitally at the fixed foot end of the gauge.

## ightarrow TECHNICAL FEATURES

### Hilti PD-E laser

The Laser Height and Stagger Gauge (P8100) uses Hilti's new IP65 rated PD-E laser range meter for height measurements.

### Viewfinder

The laser unit is positioned at eye level and features a 90° viewfinder, enabling the locator to easily set the laser location marker onto the OHL in all weather conditions, including bright sunlight.

### Illuminated LCD screen

Height and SE are displayed on an illuminated LCD screen.

### Reflective scale

Stagger position is displayed on a reflective scale, for ease of use at night as well as day.

### Non-conductive

The gauge is made of non-conductive GRP and is fully insulated.

### Assembly and portability

The gauge weighs 10kg and comes in a protective bag. The vertical beam folds down flat to the horizontal beam for storage and transport.

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### ightarrow advantages

- Because the laser unit on the Laser Height and Stagger Gauge (P8100) is at eye level, the user is able to take measurements from a standing position, reducing the fatigue caused by having to repeatedly bend down when using similar measurement equipment.
- The equipment is extremely easy to set up and use, reducing time on track and contributing to the user's safety.
- The gauge's LCD display and reflective screen make it suitable for use in all weather conditions, including bright sunlight and at night (and in tunnels).
- The high quality of the laser unit and ease of use help to ensure that measurements taken are accurate.
- The gauge is lightweight and comes in a padded bag that makes it easy to carry to and from site.



# $\rightarrow$ components ,

Sprung foot Hilti PD-E laser

Laser unit holder

90° viewfinder

Digital measurement display

Reflective scale for stagger readings

# $\rightarrow$ SPECIFICATIONS /

Technical specification	
Weight	10kg
Size (in use)	1620mm x 1450mm x 250mm
Size (folded)	1620mm x 245mm x 250mm
Cant	Range: +/- 199mm
	Accuracy: +/- 1mm
	Resolution: 0.1mm
Cable stagger	Range: -530mm to +530mm
	Accuracy: +/- 10mm @ 5m
	Resolution: 1mm
Cable height	Range: 2m to 100m
	Accuracy: +/- 3mm
	Resolution: 0.1mm

# THE P4640 GAUGE The P8100 Laser Height and Stagger Gauge is the evolution of the P4640 model. Manufactured by Manufactured by Manufactured by



