

Measuring Systems

Hilti. Outperform. Outlast.





Taking the right measures. Always.

A complete range of measuring, alignment and detection tools for everyday jobsite use.

- Laying out or measuring as-built more easily than ever before
- Everything you need for leveling, aligning, squaring and checking verticals
- Quick, easy distance measurement – virtually anywhere
- Detection and location of concealed objects for safer, more efficient drilling

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Unleashing full measuring power.

Hilti Pulse Power

Unique measuring performance.

Extremely fast. Extremely reliable.

Forget what you know about measuring technologies.

Hilti Pulse Power works with up to 1 million impulses per second allowing for highly reliable readings even under the most difficult conditions.

Pulse Power is yet another demonstration of Hilti's innovative ability and foresight. The challenge of achieving even greater reliability and efficiency in various measuring and alignment tasks has been met very convincingly. The advantages of Hilti Pulse Power are now available with a comprehensive product portfolio. Hilti, once more, impressively substantiates the power of innovation.

Rotating Lasers



Catch the Beam in one pass

On a bright, sunny day, the task of transferring reference heights over moderate distances can often become a tedious process due to difficulty in locating the rotating laser beam. Not with Hilti Pulse Power! Thanks to the high-frequency pulses of the laser beam, a single pass of the rotating laser beam over the receiver is all that is needed for immediate location of the line.

Range Meters



Top measuring performance

Thanks to Hilti Pulse Power, accurate, reliable readings can now be taken even under the most unfavorable conditions such as in bright sunlight. Hilti Pulse Power makes trouble-free measurements of distances up to 100 meters possible without need for a target plate-achieved efficiently with only one person.

Line and Combilasers



Visibility without compromise

The Hilti PM 46 multi-line laser feature outstanding outstanding visibility of the lines they project whether working with or without a receiver.

Detection Systems



Trustworthy detection

For the objects distributed under the wall, it's not always as "neat" as expected. With Pulse Power, more than 1000 pulses are excited from the detector, so that more signals can be collected for calculation, which results in highest accuracy and reliable object detection.

PULSE III POWER

Laser range meter PD 5



Applications

- Measuring distances from 0.25 m to 70 m quickly and accurately
- Measuring heights where alternative measuring methods fail
- Measuring quickly and safely in places where access is difficult

Advantages

- Simple and intuitive to use
- Single-button operation
- New compact design fits in every pocket
- Water resistant and dust tight
- Rugged and durable
- Ergonomic design for unique operating convenience



PULSE III POWER

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Technical data	
Accuracy	±1.5 mm
Measuring range	0.25 m - 70 m
Laser class	< 1 mW, 635 nm, Class 2 (IEC 60825-1:2008), Class II (FDA CFR 21 art. 1040)
Measuring functions	Single and continuous measurement
IP protection class	IP 55 (IEC 529)
Operating temperature range	-10 - 50 °C
Battery type	2 x 1.5 V (AAA)
Operating time with alkaline battery	Up to 8000 measurements
Dimensions (LxWxH)	164 x 33 x 21 mm
Data memory	Last 2 measurements



Ordering designation	Package contents	Sales pack quantity	Item number
PD 5	1x Laser range meter PD 5, 2x Battery AAA, 1x Toolbag PDA 605, 1x Belt clip PDA 615	1	2004830

Laser range meter PD 42



Applications

- Measuring distances of 0.05 m to 200 m with laser precision even under the toughest outdoor conditions
- Measuring quickly and safely in places where access is difficult
- Direct and indirect distance measurements, area and volume calculations as well as addition and subtraction
- Checking parallels and right angles using the min/max function

Advantages

- Built-in optical viewfinder for outdoor measurements
- Saves 30 measurements automatically
- Pythagorean function for determining the height of facades
- Saves time as only one person is required for most applications
- Reliable measurements and easy to use with the help of a measuring extension in inaccessible areas
- Distance values within one second



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Technical data

Accuracy	±1 mm
Measuring range	0.05 m - 200 m
Laser class	< 1 mW, 635 nm, Class 2 (IEC 60825-1:2008), Class II (FDA CFR 21 art. 1040)
Measuring functions	Single and continuous measurement
Calculation functions	Addition, Subtraction, Area, Volume, min/max, Setting out, Painters area, Pythagoras (3x), Memory (30x), Timer
IP protection class	IP 54 (IEC 529)
Operating temperature range	-10 - 50 °C
Battery type	2 x 1.5 V (AA)
Operating time with alkaline battery	Up to 10000 measurements
Dimensions (LxWxH)	120 x 55 x 28 mm
Data memory	Last 30 measurements / calculation results with graphics



Ordering designation	Package contents	Sales pack quantity	Item number
PD 42	1x Laser range meter PD 42, 2x Battery AA, 1x soft pouch PDA 65, 1x Target plate PDA 51	1	388215

Accessories for Laser Range Meters

		PD 5	PD 42	Sales pack quantity	Item number
Ordering designation					
Laser visibility glasses PUA 60		■	■	1	284988
Measuring extension PDA 71			■	1	226878
Target plate PDA 50		■	■	1	282388

Combilaser PMC 46



Applications

- Transferring reference heights
- Vertical alignment of pipes
- Leveling electric sockets, cable trays, radiators and pipe installations
- Leveling and aligning doors and windows
- Aligning and squaring drywall framing
- Transferring fastening points from floors to ceilings

Advantages

- Complete solution for interior measuring applications
- Everything you need for leveling, aligning, plumbing and squaring – in one tool
- Includes an innovative universal adapter and compact tripod for placing or mounting the tool wherever needed
- New Impact Protection System (IPS) with rugged inner pendulum housing
- Magnetic foot for easy attachment to drywall track

Technical data

Accuracy	±2 mm at 10 m
Automatic switch-off	Yes
Battery type	4 x 1.5 V (AA)
Dimensions (LxWxH)	107 x 65 x 96 mm
IP protection class	IP 54 (IEC 529)
Laser beam diameter	less than 4 mm at 5 m
Laser class	< 1 mW, 635 nm, Class 2 (IEC 60825-1:2008), Class II (FDA CFR 21 art. 1040)
Laser functionality	Level, Align, Plumb, Square
Low battery indication	Yes
Operating temperature range	-10 - 50 °C
Measuring distance min/max	10m / 30m



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Ordering designation	Package contents	Sales pack quantity	Item number
PMC 46 kit	1x Combilaser PMC 46, 4x Battery AA, 1x soft pouch, 1x Frame clamp PMA 25, 1x Universal adapter PMA 78, 1x Tripod PMA 20, 1x Case	1	411210

Accessories for Multi-directional Laser

		PMC 46		
Ordering designation			Sales pack quantity	Item number
Laser receiver holder PRA 80		■	1	360058
Laser receiver PMA 31		■	1	411288
Laser visibility glasses PUA 60		■	1	284988
Tripod PMA 20		■	1	411287
Universal adapter PMA 78		■	1	411286

Rotating laser PR 3



Applications

- Leveling (transferring heights, pouring concrete, excavation)
- Aligning (transferring building lines, aligning columns and walls)
- Slopes (ramps, parking lots, pipes)
- Squaring (walls, partitions)

Advantages

- Versatile rotating laser for leveling, aligning, slopes and squaring - indoors and outdoors
- Easy power management with rechargeable Li-ion battery pack
- High speed of rotation for a very stable line
- Remote control for operation by one person
- Built for jobsite conditions - water protected (IP 56)
- Digital measurement - read offsets from the PRA 31 laser receiver (optional accessory)


PULSE POWER

Technical data

Accuracy	±0.75 mm at 10 m
Laser class	< 4.85 mW, 635 nm, Class 2 (IEC 825-1:2008), Class II (FDA CFR 21 art. 1040)
Max. operating distance with laser receiver (diameter)	300 m
IP protection class	IP 56 (IEC 529)
Operating temperature range	-20 - 50 °C
Battery type	Li-ion
Operating time with Li-ion battery	30 h
Dimensions (LxWxH)	252 x 252 x 201 mm
Rotation speed	300 rpm, 600 rpm, 1500 rpm
Self-levelling range at room temperature	5 °
Weight with batteries	2.4 kg



Ordering designation	Package contents	Sales pack quantity	Item number
Rotating laser PR 3 (indoor)	1x Rotating laser PR 3, 1x Battery pack PRA 84, 1x Remote control PRA 2, 2x Battery AA, 1x Target plate PRA 51, 1x Mains adapter PUA 81, 1x Case	1	2007617
Rotating laser PR 3 combo (indoor / outdoor)	1x Rotating laser PR 3, 1x Battery pack PRA 84, 1x Remote control PRA 2, 2x Battery AA, 1x Target plate PRA 51, 1x Mains adapter PUA 81, 1x Laser receiver PRA 20, 1x Laser receiver holder PRA 80, 1x Tripod kit PUA 20, 1x Case	1	3500560

Accessories for Rotating Laser

		PR 3		
Ordering designation			Sales pack quantity	Item number
Battery pack PRA 84		■	1	360055
Crank tripod PA 921 (0.73m - 1.63m)		■	1	378663
Laser receiver holder PRA 80		■	1	360058
Laser receiver PRA 20		■	1	2071120
Laser visibility glasses PUA 60		■	1	284988
Mains adapter PUA 81		■	1	2006089
Remote control PRA 2		■	1	331418
Slope adapter PRA 78		■	1	360059
Target plate PRA 50		■	1	285415
Tripod Kit PUA 20 (Tripod with measuring rod)		■	1	400936
Tripod bag PUA 40		■	1	377847

Ferrodetector PS 35



Applications

- Locating reinforcement, copper or aluminium pipes in concrete
- Locating copper or aluminium pipes in brick walls
- Determining the position and depth of existing rebar for post-installed rebar connections
- Checking concrete cover over reinforcement for trouble-free anchor setting

Advantages

- Minimizes damage to rebar, copper and aluminium pipes when drilling
- Avoiding hitting rebar increases drill bit lifetime
- Simple, user-friendly operation
- Clear indication of detection with red / green LED
- Ruggedly built for jobsite use
- Measures depth of concrete cover over rebars with high accuracy



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Technical data

Accuracy of depth measurement for rebar¹⁾	± 3 mm
Operating temperature range	-15 - 50 °C
Localization accuracy¹⁾	±10 mm
IP protection class	IP 54 (IEC 529)
Weight with batteries	450 g
Dimensions (LxWxH)	230 x 100 x 45 mm
Low battery indication	Yes
Operating time with alkaline battery	8 h
Battery type	4 x 1.5 V (AAA)
Max. depth for determining depth of coverage¹⁾	120 mm
Max. detection depth for non-ferrous metal objects¹⁾	80 mm

¹⁾ Performance and accuracy can be significantly affected by site conditions. See operating instructions.



Ordering designation	Package contents	Sales pack quantity	Item number
PS 35	1x Ferrodetector PS 35, 4x Battery AAA, 2x Marker pen, 1x Toolbag PSA 66, 1x Case	1	407961