

# Automatic Precision-Laser PL-51



## The automatic precision laser type PL-51

is an all-round laser for horizontal and vertical use capable of electronic self-levelling over three axes. Thanks to a beam splitting prism in the rotor head, it can also be used as right-angle and vertical laser. It emits a stationary or rotating laser beam, which becomes a light plane.

### First fully automatic laser

with pioneering automatic horizontal, vertical and direction function.

### Automatic direction function

Sensational new laser applications possible. Additional safety and fast working with a compact device. Extremely high precision of up to  $\pm 0.5$  mm/100 m.

### Rotor speed

Progressively adjustable from 0 – 800 rpm.

### Manual rotor setting

User-friendly operation thanks to rotor fixing and plumb-line function.

### Automatic function can be switched off

Therefore inclination adjustment by points of reference possible.

### Robust metal housing

Plastic-coated, filled with nitrogen, 100% watertight.

### Easy-to-use keyboard

Clear layout, practical, big, user-friendly keyboard.

### Special laser beam quality

Visible diode laser with high life expectancy and low power consumption.

### Built-in rechargeable battery

Cable-free laser operation, for independence from external power sources. Recharged in 3 1/2 hours.

Special feature: protection against discharging by automatic transport cut-out.

### Mains operation

Direct connection to 220 V AC via charging device with simultaneous charging of the batteries. Continuous operation possible only with NE-05.

## Delivery package

		X = standard supply
		O = optional
1	Laser device complete with operating instructions	X
2	Magnetic target signal	O
3	Spacer bracket for laser receiver	O
4	Laser receiver LE-58 with battery and rod clamp	O
5	Laser receiver LE-95 with battery and rod clamp	O
6	9 V block battery	O
7	Centre-spigot adapter, D = 28 mm	O
8	Battery charging device	X
9	Battery charging plug for 9 V battery	O
10	9 V battery for laser receiver	O
11	Ground/Wall tripod	O
12	Mounting adapter for laser receiver	O
13	Rod clamp for laser receiver	O
14	Facade tripod	O
15	Wall bracket	O
16	Batter board clamp for laser transmitter	O
17	Batter board clamp for laser receiver	O
18	Transport case with foam lining	X

Extensive range of further system accessories for all tasks.

## Outstanding technical specifications

Laser type:.....diode laser with visible beam in red, 630-670 nm, typically 658 nm

Laser beam quality: .....high homogeneity

Laser class:.....2 according to DIN EN 60825-1 / IEC 825-1

Output rotating beam / vertical beam: ..... $\leq 1$  mW each

Beam diameter: .....6 mm at laser

Laser beam: .....focussed on 25 m

Angle error between stationary and rotating beam:

..... $\pm 2$  mm / 100 m

Height offset at one rotation of 360°:

..... $\leq \pm 0.1$  mm, typically  $\pm 0.05$  mm

Conical error: ..... $\leq 2$  mm / 100 m

Levelling precision: ..... $\pm 2.5$  mm / 100 m

Working distance:.....min. 1 m / max. 50 m

Power supply: .....5 V DC / 0.2 A

Operating time of built-in rechargeable battery: .....up to 15 hours

Charging time of built-in rechargeable battery: approx. 3 1/2 hours

Reverse voltage protection: .....yes

Undervoltage cut-out:.....yes

Automatic function: .....horizontal and vertical

Self-levelling range: ..... $\pm 5^\circ$

Direction setting range: ..... $\pm 5^\circ$

Automatic direction function: .....via laser receiver LE-58

Watertight:.....0.35 bar

Temperature range:.....0°C to +40°C

Dimensions: ..... $\square 120 \times 205$  mm

Weight: .....approx. 3.0 kg

Guarantee:.....12 months

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