

# **Automatic Plumb Laser LL**

**GEO  
LASER**  
Messtechnik

*Going up or down quickly and safely*

**Plumb-down  
Laser:  
LL-82/LL-83**

**Plumb-up  
Laser:  
LL-80/LL-81**



# Automatic Plumb Laser LL-80

**plumbing quickly and safely means: inexpensive**

## Functional description

The automatic plumb laser LL-80/-81 is a laser for plumbing up, the automatic plumb laser LL-82/-83 is a laser for plumbing down, capable of electronic self-levelling over two axes.

## Performance features

### ● LL-80/-82

Laser class 2, laser power < 1 mW.  
No special safety precautions necessary.  
The easy standard laser class.

### ● LL-81/83

Laser class 3R, laser power < 5 mW, high-power version.  
Laser power adjustable in five steps.

### ● Fully automatic

Automatic levelling and cut-out in case of low battery or jerky movement.

### ● Robust metal housing

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

### ● Special laser beam quality

Diode laser with visible beam, high-powered lens, high life expectancy and low power consumption.

### ● Practical carry handle

For easy carrying and handling.

### ● Built-in rechargeable battery

Cordless laser operation for 40 hours, makes the user independent of external power sources. Recharged in 5 hours.  
Special feature: protection against discharging by automatic transport cut-out.

### ● Increased safety

Control indicators with blinking warning system for levelling, operating status and low battery.

### ● Uncompromisingly easy

All you have to do is switch on/off. The rest is done by the LL-80 automatically.

### ● Checking and adjustment

Easily possible at the building site as well. The device does not have to be opened for adjustment.

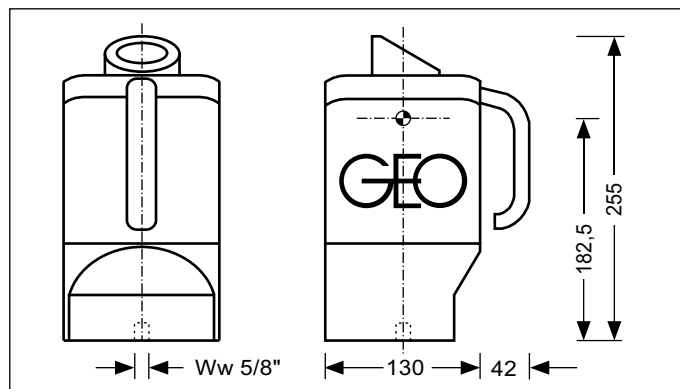
## GEO quality guarantee

The new generation of lasers is the result of years of experience in the research, development and production of laser devices for the construction industry.

## Technical specifications

Laser class LL-80/-82: ..... 2, < 1 mW  
Laser class LL-81/-83: ..... 3 R, < 5 mW  
Laser: ..... diode laser, visible red, 635 nm  
Beam diameter: ..... 13 mm at laser  
Range LL-80/-82: ..... to 200 m  
Range LL-81/-83: ..... to 500 m  
Self-levelling range: .....  $\pm 5\%$   
Permissible deviation: .....  $\pm 5$  mm/100 m  
Operating time: ..... NiMh battery to 40 hours  
External power supply: ..... 11 to 14 V DC with cable 0117.00  
Low battery cut-out: ..... yes  
Watertight: ..... to 3.5 m  
Temperature range: ..... - 10° C to + 50° C  
Weight: ..... 3.4 kg  
Adjustment: . possible in the field without having to open the device  
Guarantee: ..... 24 months

## Dimensional sketch



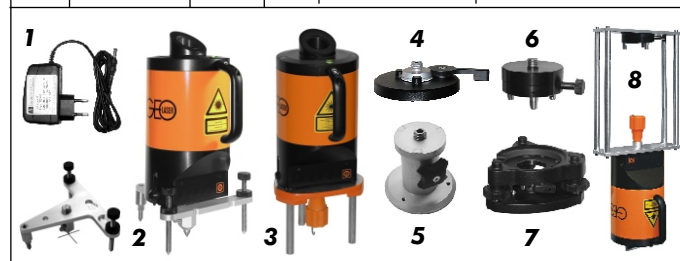
## Standard delivery package

No.	Order No.	Type	Description
01	0001.4xx	LL-8x	Plump laser
02	0037.16	LG-80	Battery charger
03	0077.36		Transport case
04	0094.00.1		5/8"-hexagon bolt with nut and washer
05	0002.00	LL-ZT	Target with coordinates grid
1-5	0001.400.1		LL-80 with standard delivery package
or	0001.410.1		LL-81 with standard delivery package
or	0001.420.1		LL-82 with standard delivery package
or	0001.430.1		LL-83 with standard delivery package
-	8675.11		Extra Charge, Deviation: $\pm 2.5$ mm/100 m



## Optional accessories

No.	Order No.	Type	Description
1	0037.12	NE-06	Power supply with connection cable, 2 m
2	0061.07	ST-08	Plump Tripod
3	0061.15	BS-20	Ground tripod
4	0056.00.2		Quick-Fix base plate
5	0056.00.1		Standard tripod adapter with centre spigot
6	8803.06	KA-84	Claw adaptor, swivelling, system Leica/Wild
7	8869.00	DF-TZ	Tribrach, system Trimble/Zeiss
8	0033.13		Plump-down laser adaption



## GEO - partner of the construction industry for 45 years

from:

**European Quality Product**



# GEO-Feinmechanik GmbH

**Laser for civil and underground engineering, interior works, machine control**

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Subject to change. Made in Germany.

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