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# LASER METER 50



0,5-50m



m<sup>2</sup>/m<sup>3</sup>  
ft<sup>2</sup>/ft<sup>3</sup>



precision  
±0,002 m



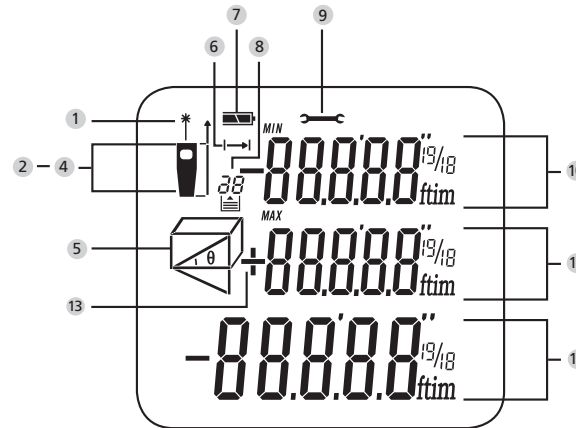
indirect  
measurement

**ProfiScale LASER METER 50**  
**Laser Distance Meter**  
**en Operating instructions**

**BURG-WÄCHTER KG**  
Altenhofer Weg 15  
58300 Wetter  
Germany



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## Introduction

The LASER METER 50 PS 7550 laser distance measurement device is intended for precision measurement of distances and clearances and for calculation of surface areas and volumes. In addition, also inaccessible lengths can be measured by means of indirect distance measurement. Thanks to these and other functions, it is an ideal measurement device for interior designers, building companies, real estate agents, craftsmen, etc.

## Structure

- |  |  |
|--|--|
| A On and measurement button                      | 1 Laser active   |
| B Distance measurement button                    | 2 - 4 Measurement basis  |
| C Button for surface area and volume measurement | 5 Variable measurement functions<br>Surface area measurement<br>Volume measurement |
| D Button for indirect measurement                | 6 Individual length measurement  |
| E Button for continuous measurement              | 7 Battery status indicator   |
| F Off button                                     | 8 Reading memory   |
| G Calling of memory                              | 9 Failure symbol   |
| H Delete button for the last reading             | 10 First reading   |
| I Lighting and unit selection button             | 11 Second reading  |
| J Subtract button                                | 12 Resulting reading of first measurement<br>or calculated result                  |
| K Add button                                     | 13 Computing operations<br>+ Add symbol<br>- Subtract symbol                       |
| L Reference plane                                |  |
| M End stop                                       |  |

## Safety instructions

### Injuries can occur if the following instructions are not observed:

1. Please read these Operating Instructions attentively before using the device. Keep the Instructions for future use.

2. The warning labels on the device shall never be made unrecognizable or removed from the device.

The device is shipped with warning notices in the German language. Please paste the attached warning labels in your language over the original ones before the initial commissioning.



**LASER RADIATION**  
Never look into the beam  
Laser class 2

EN 60825-1: 2007  
P<sub>max</sub><1 mW; λ=635 nm

3. Never point the laser beam at the eyes of other persons or animals.

Do not look into the laser beam and do not handle the laser light using optical equipment. This can damage the eyes.

4. Never let children use the laser meter without surveillance. They can inadvertently injure themselves or other persons.

5. Do not use the device in flammable or explosive environment. Sparks can be generated in the device, which may cause fire in the environment.

6. Have the measurement device repaired by qualified professionals only and using original replacement parts. In such a way, the safety of the device can be preserved.

Attention: The measurement device may lose its precision by a strong impact and when falling. Whenever in doubt, perform an accuracy check using a well known measured distance for the sake of certainty. The measurement device shall be protected from humidity and strong effects of heat caused e.g. by direct sunshine. Please provide enough time for the device to adjust to the ambient temperature.

## Warranty

### Congratulations

that you have decided for the ProfiScale quality measurement technology by BURG-WÄCHTER. BURG-WÄCHTER provides a warranty of 2 years from the date of purchase. Excluded from this warranty are damages caused by inappropriate use, overstrain or improper storage, as well as normal wear and tear and deficiencies with an insignificant influence on the value and function of the device. The warranty becomes void in case of any unauthorized intervention. In the event of a warranty claim, please provide the complete device incl. its packaging, description and batteries, as well as your purchase document, to your dealer.

## Technical data

<b>Effective measurement range</b>	0,05 to 50 m 0,16 to 164 ft
<b>Accuracy</b>	± 0,002 m *
<b>Resolution</b>	0,001 m
<b>Units of measure</b>	m, in, ft
<b>Laser type</b>	λ=635 nm; P <sub>max</sub> <1 mW
<b>Laser class</b>	class II
<b>Type of protection</b>	IP 54
<b>Power supply</b>	2 x AAA Micro LR03 batteries
<b>Automatic shutoff</b>	The laser switches off automatically after 30 seconds. The device powers off automatically after 3 minutes.
<b>Operating temperature</b>	0 °C to 40 °C
<b>Storage temperature</b>	-10 °C to 60 °C
<b>Dimensions</b>	115 mm x 60 mm x 29 mm
<b>Weight</b>	approx. 150 g (without batteries)

\* The operating range and the accuracy depend on the ambient conditions. In case of adverse conditions, such as strong sunshine and/or poorly reflecting measured surfaces, the readings may differ from the values indicated in the table.

## Operation

### Insert/replace the batteries

Open the battery compartment cover at the back of the device by first loosening the safety screw and then pulling the battery compartment cover up. Then insert the batteries as indicated in the battery compartment. Then replace and fix the battery compartment cover.

Attention: Remove the batteries when not using the device for a longer period of time.

### Switch the device on

Press the button "A" and, before measurement, check the activated reference plane.

### Reference plane

Three different reference planes can be selected in the measurement device:

- The device rear edge, to be applied for example on a wall
- The device front edge, to measure for example from a sharp edge
- The movable end stop "M", in order to measure from corners or poorly accessible places

To change the reference plane, press the button "L". The active plane is indicated in the display under "2-4". Whenever the measurement device is switched on, the reference plane is set to the device rear edge.

## Measurement functions

### Length measurement

Length measurement is preset when the device is switched on. The display indicates the length measurement symbol. Aim at the end of the measured distance and press the button "A" again. The reading is indicated below in the "12" display.

### Surface area measurement

Press the button "C" once in order to select surface area measurement. The display indicates the symbol for surface area measurement, the first surface length flashes. Aim at the desired target and press the button "A" once to take the measurement. The reading is indicated above in the "10" display, while the second surface length flashes. Use the laser to aim at the next target and press the button "A" to take the measurement. The reading is indicated in the "11" display, while the resulting surface area has been calculated and indicated in "12".

### Volume measurement

Press the button "C" twice in order to select volume measurement. The display indicates the symbol for volume measurement, the first volume length flashes. Aim at the desired target and press the button "A" to take the first measurement. The reading is indicated above in the "10" display, while the second volume length flashes. Use the laser to aim at the next target and press the button "A" to take the measurement. Proceed in a similar way for the third length. The reading is indicated in the "11" display, while the resulting volume has been calculated and indicated in "12". Indirect length measurement Using this function you can measure directly inaccessible distances (e.g. exterior wall heights), as two or three measurable lengths are mutually related based on trigonometric functions.

### Measurement based on two lengths

Press the button "D" once in order to select indirect length measurement. The display indicates the indirect measurement symbol, the first length flashes. Aim at the desired target and press the button "A" once to take the first measurement. The reading is indicated above in the "10" display, while the second length in the display flashes. Use the laser to aim at the next target and press the button "A" to take the measurement. The reading is indicated in the display, while the resulting length has been calculated and indicated in "12".

### Measurement based on three lengths

Press the button "D" twice in order to select indirect length measurement based on three lengths. The display indicates the indirect measurement symbol, the first length flashes. Aim at the desired target and press the button "A" once to take the first measurement. The reading is indicated above in the "10" display, while the second length in the display flashes. Use the laser to aim at the next target and press the button "A" to take the measurement. The reading is indicated in the display. Proceed in a similar way for the third length. The reading is indicated in the display, while the resulting length has been calculated and indicated in "12".

## Continuous measurement

The continuous measurement function is intended for deriving dimensions for instance from construction plans. The minimum and maximum values can also be determined in this way. When this function is used, the measurement device moves relative to the target, while the reading is updated approx. every 0.5 sec. During this, the minimum distance is indicated in the "10" display and the maximum distance in the "11" display. The currently measured value is always indicated in the "12" display. Press the button "5" for approx. 3 sec until you receive an indication and move the measurement device. The distances are indicated in the display. To deactivate the function, press the button "A". The function switches off automatically after 100 measurements.

## Computing operations

### Addition

This is intended to add two or more lengths. When you have measured the first length, press the add symbol "K". The reading is indicated above in the "10" display, while the "+" symbol in the display flashes. Press the button "A" again, and the total is indicated in the bottom line. You can add more values in this way.

### Subtraction

When you have measured the first length, press the subtract symbol "J". The reading is indicated above in the "10" display, while the "-" symbol in the display flashes. Press the button "A" again, and the total is indicated in the bottom line. In this way, you can subtract more values from each other.

## Memory function

The memory function contains the 10 last readings. For this purpose, press the button "G". The memory values can be scrolled using the Add and Subtract buttons (buttons "J" and "K") and thus shown in the display. Individual readings can be deleted from the list using the Delete button "H".

## Lighting and unit selection button

The display lighting can be switched on and off by pressing the lighting or unit selection button briefly. When the button is pressed for a longer time, the unit of measure of the readings changes (m, ft, in, ft+in).

## Causes and removal of errors

The device will help you in case of measurement troubles, as various codes are indicated in the display.

Error Codes		Correction
204	Calculation error	Repeat the process
208	Received signal is too weak, measurement takes too long Measured distance > 50m.	Measurement with a target plate
209	Received signal is too strong.	Measurement with a target plate
252	Temperature is too high	Cool the device down
253	Temperature is too low	Warm up the device
255	Device failure	Switch the device on and off several times. In case the error message persists, please contact your dealer.

## Disposal of the device

### Dear customer,

please help us to reduce waste. Should you ever intend to dispose of this device, please bear in mind that many components of the device contain precious materials, which can be recycled. Please do not dispose of this device as common waste, but rather request information from the responsible local authority on the collecting points for electric waste.



### The dustbin symbol indicates:

Discharged batteries or accumulators must not be disposed as common waste. Please return the batteries/accumulators to their vendor or the local recycling yard. Their return is free of charge and it is legally required.

Errors and changes reserved.