

Water Level Measurement Solution

Measuring and Managing Levels

Manual for Installation and Operation



1 Installation



WARNING – Beware of high voltage. To avoid electric shock hazard, never work on a system connected to power or within two minutes after disconnection.

READ AND FOLLOW ALL INSTRUCTIONS!

RETAIN THESE INSTRUCTIONS FOR FUTURE USE!

Before installing the WLMS, disconnect the controller from the power supply.

1. Plug the barometer PCB into the main board of the PS2 controller or in the IO board of the PSK3 controller (see for reference figure 1 and 2). For a PS2 controller, a main board version V2.0 or higher is required
2. Attach the WLMS balancing valve inside a cable gland, see figure 3
3. Install the WLMS sensor above the non-return valve of the pump
4. Connect the WLMS to the analog input terminals of the controller
5. Ensure the latest PumpScanner version is installed (V3.57 or higher) or the latest LORENTZ Assistant version (V1.2.0 or higher) is installed
6. Use PumpScanner/Assistant to connect to the controller, update the firmware if needed, and add WLMS under installation settings (see figure 4 & 6)
7. Open feature settings (PS2) or the operational settings (PSk3) to adjust switch on / off levels. A switch off level of less than 0.5 m is not possible (see figure 5 & 7)

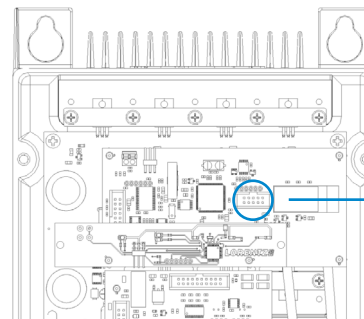


Figure 1: PS2 controller board with barometer PCB

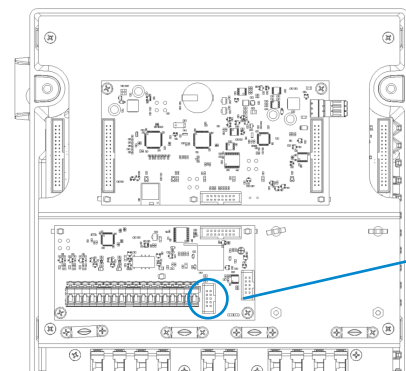
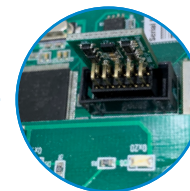


Figure 2: PSK3 controller board with barometer PCB

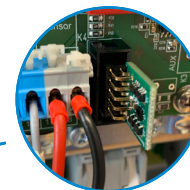


Figure 3: Valve fixed inside cable gland

Figure 4: PumpScanner Installation Settings

20229369 PS2-600 C-SJ5-8

Water Meter

Analog Input 1

Sensor Type WLMS-25

Measuring range 25 m

Water Level Display Offset 0 m

Liquid Density 1000 kg/m³

Analog Input 2

Sensor Type WLMS-25

CANCEL **SAVE**

Figure 5: PumpScanner Feature Settings

20229369 PS2-600 C-SJ5-8

Feature Settings

Pump Control

Control Pump by Pressure

Control Pump by Level Sensor

Analog Input 1

Pump OFF **BELOW** 0.5 m

Pump ON **ABOVE** 0.8 m

Delay timer 0 min.

Analog Input 2

Sensor combination

Control Pump by Water Meter

Switch output

CANCEL **SAVE**

Figure 6: Assistant Installation Settings

PSk3 Demo Pump

DASHBOARD DATA **SETTINGS**

100.00

Analog Input 1 WLMS-25

Range max. [m] 25.0

Analog Input 2 Level Sensor

Range max. [m] 100.0

AC power source Grid

Grid type Star grounded

Grid Voltage 415 V

Figure 7: Assistant Operational Settings

PSk3 Demo Pump

DASHBOARD DATA **SETTINGS**

Constant level

Level Limit 1

Source Analog Input 1

Min. level

Min. level value [m] 0.5

Undershoot tolerance [sec.] 0

Restart mode **Delay Timer**

Restart level [m] 0.8

Restart delay [sec.] 0

Max. level

Level Limit 2

Source Analog Input 2

Min. level

About LORENTZ

LORENTZ is the global market leader in solar powered water pumping solutions. Founded in Germany during 1993 LORENTZ has pioneered, innovated and excelled in the engineering and manufacturing of solar powered water pumping. Today LORENTZ is active in over 130 countries through a dedicated network of professional partners. LORENTZ technology uses the power of the sun to pump water, sustaining and enhancing the life of millions of people, their livestock and crops.

Simply - *Sun. Water. Life.*



LORENTZ Germany
Siebenstücken 24
24558 Henstedt-
Ulzburg
Germany

LORENTZ China
No 34 Jiuan Road
Doudian Town
Fangshan District
102433 Beijing
China

LORENTZ US Corp
710 S HWY 84
Slaton, TX 79364
USA

LORENTZ India Pvt.
Ltd.
Netaji Subhash
Place
Pitampura110034
New Delhi
India