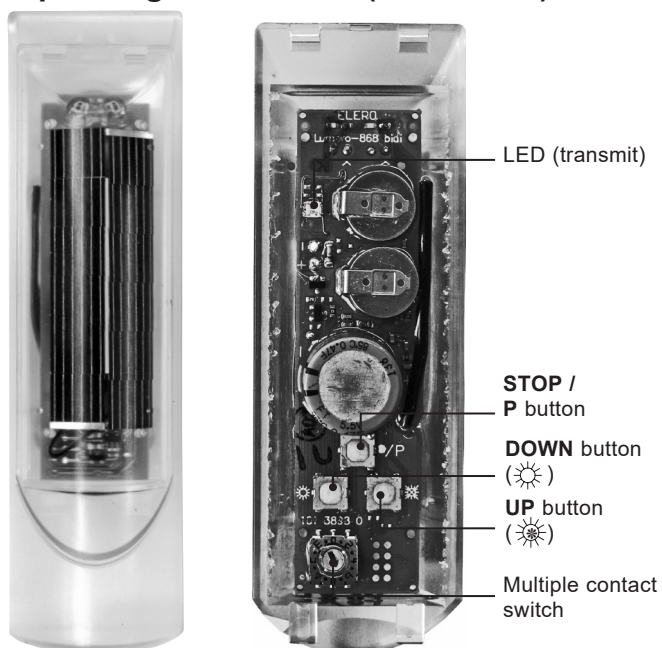


Operating instructions (translation)



General information

The Lumero-868 is a wireless sun sensor for your shade system (roller shutters, awnings, venetian blinds).

Integrated solar cells enable autonomous function of the device. Radio signals (frequency 868 MHz) are transmitted between the Lumero-868 and the receiver.

Important!

The Lumero-868 only operates in combination with radio receivers from the **elero** ProLine and ProLine 2 radio-system.

Manual operation of the system is carried out with a manual/wall transmitter. This item is not included in the scope of delivery.

Recommendation:

Use a LumeroTel or VarioTelPlus hand-held transmitter to deactivate the sun function.

Safety instructions



Warning!

Important safety instructions!

Observe the following instructions:

- Only use unmodified original **elero** electrical parts.
- Keep persons away from the operating range of the system.
- Keep children away from the controls.
- Follow the relevant country-specific regulations.
- If one or more devices are used for controlling the system, the operating range must stay visible during operation.
- The device contains swallowable small parts.

Intended use

The Lumero-868 may only be used for controlling roller shutter, awning and blind systems.

Third-party devices should only be connected after consultation with your specialised dealer.

- Please ensure that the radio installations are not operated in areas of heightened possible interference (e.g. hospitals, airports ...).
- The remote control is only approved for devices and systems for which any malfunction of the manual transmitter or receiver would not result in a risk for persons, animals or property, or if such a risk is covered by other safety devices.
- The operator has no protection whatsoever from interferences by other radio emitters and local terminals (e.g. also from radio installations), that are normally used on the same frequency range.
- Only use radio receivers with equipment and units approved by the manufacturer.

Device function

The light intensity is measured at intervals and compared with the set values.

Brightness above set value (delay time approx. 5 - 7 min.)

→ Awning moves out, roller shutter, venetian blind moves down (flashing LED).

Brightness below set value (delay time approx. 15 - 17 min.)

→ Awning moves in or remains in, roller shutter, venetian blind moves up.

The sliding switch at the programmed manual transmitter can be used to switch the light function of the Lumero-868 on or off.

Technical data

Power supply	Solar
Temperature range	-25 °C bis +60 °C
Detection angle	190 °
Protection class	IP 54
Radio frequency for USA and some countries from south america, Canada, Australia	868 MHz 915 MHz
Standby	approx. 1 hour

Charging the Lumero-868

The Lumero-868 is delivered in the discharged condition.

Place the Lumero-868 under a lamp for at least 30 minutes or push the DOWN-button on the Lumero-868 for at least 3 minutes before starting up.

Note: The travel keys have two levels.

The first level transfers energy from a built-in battery to the energy store.

The second level activates the travel command.

Programming Lumero-868

Condition

The end positions of the awning, the roller shutter or the venetian blind have been set, a transmitter has been programmed, and the Lumero-868 has been loaded (LED lights and/or flashes when a button is pressed).

For bidirectional use, the device version of the installed radio receiver is relevant:

elero Combio from version 75 onwards

elero RevoLine from version 21 onwards or

elero radio receiver from manufacturing date May 2012.

1. Move the blind to an intermediate position.
2. Press and hold the **UP**, **DOWN** and **P** buttons on the programmed hand-held transmitter for at least 3 seconds.
If the blind not travels UP and DOWN, continue at 4.
If the blind does not travel UP and DOWN, continue at 3.
3. Press and hold the **STOP/P** button on the Lumero-868 for 3 seconds until the transmission LED begins flashing orange rapidly. The blind now moves UP and DOWN for 2 minutes. The transmission LED will flash orange rapidly every time a button is pressed if the system is in programming mode.
4. Press the **UP** button on the unit immediately after the start of an up movement (retract) begins.
The drive will stop briefly.
5. Press the **DOWN** button on the unit immediately after the start of a down movement (extend) begins.
The drive will stop briefly.

The Lumero-868 is now programmed.

Possible modes of operation

The Lumero-868 can be operated in four different modes. The operating mode is indicated by the flashing signal:

1. Awning mode
(1 x flashing of the transmission LED)
2. Visual protection mode
(2 x flashing of the transmission LED)
3. Roller shutter mode
(3 x flashing of the transmission LED)
4. Test mode (checking the light function)

The current mode of the Lumero-868 is displayed by means of the flashing of the LED.

The awning mode is set as standard in the delivery condition.

In the case of OEM versions, a different mode can also be set.

Awning mode

The awning is automatically retracted when the current measured sun value changes from 1 to 0 (late evening) or when the current measured light value changes from 0 to 1 (early morning).

Visual protection mode (protection against prying eyes)

To keep the blind closed even in the evening, close the blind manually using your hand-held transmitter or a timer.

The current transitions of the measured light values from 1 to 0 (late in the evening) or from 0 to 1 (early in the morning) will be ignored.

The blind will remain closed throughout the night.

The switching commands such as tilting position (venetian blind) or ventilation position (roller shutter) will be executed automatically the next day.

Roller shutter mode

If the roller shutter is driven manually or by a timer of the lower end position, the light function (driving according to set light value) will be switched off.

The current transitions of the measured light values from 1 to 0 (late in the evening) or from 0 to 1 (early in the morning) will be ignored.

Test mode (checking the light function)

Condition:

The blind is retracted.

The delay times are shortened in the test mode (from minutes to seconds). You can then test the travel movement of your system when the light threshold is exceeded.



Risk of injury by the upward and downward travel of the awning/venetian blind.

The test mode is active for 5 minutes. This time cannot be shortened.

Warning! Keep away from the operating range of the system.

1. Press the **UP** button for at least 3 seconds until the transmission LED flashes.
The test mode stays active for 5 minutes but the LED goes out.
2. Shine a torch (not a LED lamp) on the light sensor.
Specified light threshold value is exceeded.
→ blind extends/lowers after 5 seconds.
Light value falls below the specified threshold.
→ upward travel of the awning/blind after 15 seconds.

You can repeat the operation as often as you want within 5 minutes.

Setting the threshold values

Insight the Lumero-868 you will find a multi-way switch for setting the threshold value for light; this can be adjusted using a small screwdriver.

Setting the threshold values at the Lumero-868	
Step 0	light function is switched off / change over the mode
Step 1	extend in low light level minimum responsivity
Steps 2 - 9 and A - E	13 Steps
Step 7	factory setting (intermediate levels)
Step F	extend at a high level maximum responsivity

Deleting the programmed Lumero-868

Press the ☀ - and the ☀-button simultaneously. The LED goes out. Wait until the LED lights up again after approx. 3 seconds. The lumero-868 is deleted.

Change the mode

There is a multiple contact switch inside the Lumero-868.

1. Use a small screwdriver to set the multi-way switch to 0.

2. Press and hold the **UP** and **DOWN** buttons for at least 3 seconds. Pressing the two buttons again switches to the next mode.
- The current mode of the Lumero-868 is indicated by the transmit LED flashing:
- Transmission LED flashes 1x → awning mode

Transmission LED flashes 2x → visual protection mode

Transmission LED flashes 3x → roller shutter mode

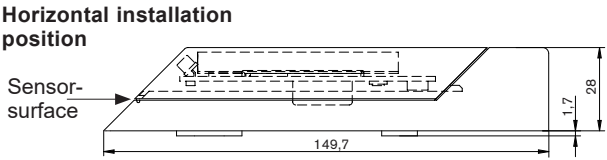
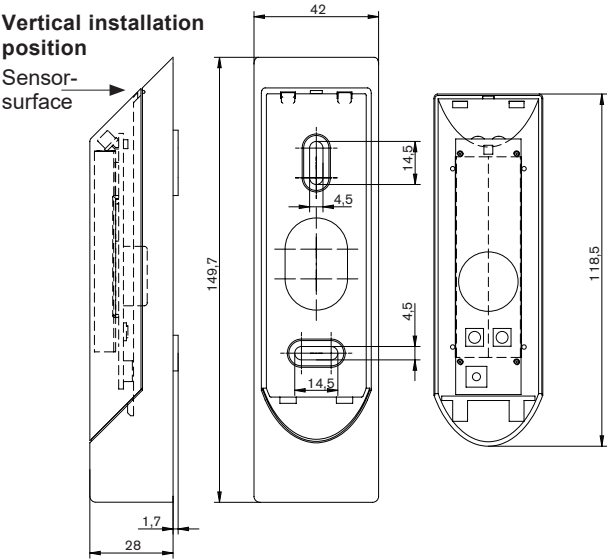
The mode set is indicated at each radio transmission by the flashing of the transmission LED (LED flashing pattern every 3 minutes). Set the multi-way switch back from 0 to a light value of your choice.

Installation

Check whether a perfect radio connection exists between the Lumero-868 and the receiver before installation at the desired installation position.

Hinweis

Fix the Lumero-868 with the screws provided.



Maintenance

The Lumero-868 is maintenance-free, but the cover must be cleaned from time to time. Otherwise, light entry is limited and shortens functioning time.

Troubleshooting

Fault	Cause	Remedy
<ul style="list-style-type: none">Awning does not move out in sunny conditions	<ul style="list-style-type: none">Threshold set incorrectlyManual mode is setPoor radio connectionLight sensor is dirtySun threshold (level 0)	<ul style="list-style-type: none">Set correct valueSet automatic modeChange the position of the Lumero-868Clean light sensorSet appropriate level

EC-DECLARATION OF CONFORMITY

We hereby declare that the following mentioned product/s meet/s the standards of the European Community.

Product designation: **ProLine 2**


- Lumo-868 all versions
- Lumero-868 / -915 all versions
- Aero-868 / -915, Aero-868 / -915 Plus, Aero-868 / -915 AC all versions
- Sensero-868 / -915 AC, Sensero-868 / -915 AC Plus all versions

Description: Sun, dusk, wind and rain sensors with bidirectional and unidirectional radio-based sensor system.
Can be used in conjunction with controllers for opening and closing roller shutter and other shading systems as well as other actuators.

The conformity of the above mentioned products with the relevant health and safety requirements is taken into account by the following directives and standards:

- EMC Directive 2004/108/EC
EN 61000-6-2:2005, EN 61000-6-3:2001
EN 60730-1:2000, EN 60730-2-7:1991
- Low Voltage Directive 2006/95/EC
EN 60335-1:2002
- R&TTE Directives 1999/5/EC
ETSI EN 301 489-3 V1.4.1
ETSI EN 300 220-2 V2.1.2
- RoHS Directive 2002/95/EC

Beuren, 05.07.2012



Ralph Trost
-CE Manager-, -Representative documentation -