

User manual

Shutter Controller



Please keep this page with the full device specific key (DSK) in a safe place!
It is needed throughout the entire product lifetime

TechniSat

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1 Safety warnings



INSTALLATION

1. To prevent electrical shock and/or equipment damage, disconnect electrical power at the main fuse or circuit breaker before installation and maintenance.
2. Be aware that even if the circuit breaker is off, some voltage may remain in the wires – before proceeding with the installation, be sure no voltage is present in the wiring.
3. Take extra precautions to avoid accidentally turning on the device during installation.
4. Connect the device according to the wiring diagram.



Danger of electrocution!

Installation of this device requires a great degree of skill and may be performed only by a licensed and qualified electrician. Please keep in mind that even when the device is turned off, voltage may still be present in the device's terminals.

2 IMPORTANT DISCLAIMER

Wireless communication is not always 100% reliable. This device should not be used in situations in which life and/or valuables are solely dependent on its functioning. If the device is not recognized by your gateway (hub) or shows up incorrectly, you may need to change the device type manually and make sure your gateway (hub) supports Z-Wave Plus devices.

WARNING

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being. When replacing old appliances with new ones, the retailer is legally obligated to take back your old appliance for disposal free of charge.

Z-Wave

This product can be operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

Z-Wave Plus

This device is a security enabled Z-Wave Plus product that is able to use encrypted Z-Wave Plus messages to communicate to other security enabled Z-Wave Plus products.

This device must be used in conjunction with a Security Enabled Z-Wave Controller in order to fully utilize all implemented functions.

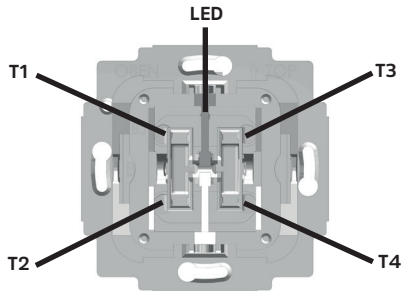
3 Key features

The TechniSat Shutter is designed to control a roller shutter

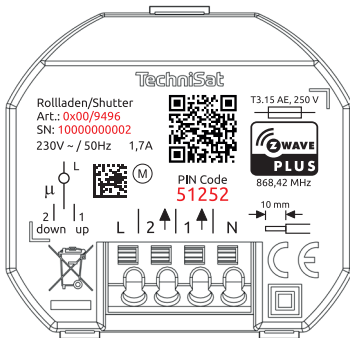
- In-wall mounted shutter control
- Z-Wave Plus
- Security S2
- SmartStart
- compatible with German market wall switch product lines
- Overload protection

4 Overview

Front

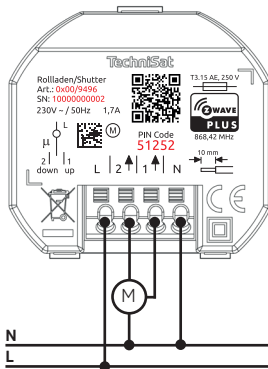


Back



- L Live lead
- 1 Switched output to shutter motor - up direction
- 2 Switched output to shutter motor - down direction
- N Neutral lead

5 Wiring diagram



6 SmartStart inclusion

SmartStart enabled products can be added into a Z-Wave network by scanning the Z-Wave QR Code present on the product with a controller providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of being switched on in the network vicinity.

1. The Z-Wave QR-Code is located on the back of the product.
2. Please follow your SmartStart enabled Z-Wave gateway's manual, on how to use SmartStart inclusion.
3. Install the TechniSat Shutter.
4. After checking the correct installation, re-enable electrical power at the main fuse or circuit breaker
5. The TechniSat Shutter will be added to your Z-Wave network within 10 minutes after re-enabling electrical power.

7 Manually adding the device to the Z-Wave network

1. Install the TechniSat Shutter.
2. After checking the correct installation, re-enable electrical power at the main fuse or circuit breaker.
3. Start the Z-Wave device add mode on your Z-Wave gateway, according to the gateway's manual.
4. Press T1 3x within 1 second.
5. The red status LED is on while the device is added to the Z-Wave network.
6. The green LED is on for 5 seconds after successfully adding the device.

8 Removing the device from the Z-Wave network

1. Start the Z-Wave device remove mode on your Z-Wave gateway, according to the gateway's manual.
2. When the roller shutter is in the uppermost position, press and hold T1 for more than 10 seconds.
3. The red status LED is on while the device is removed from the Z-Wave network.
4. The green LED is on for 5 seconds after successfully removing the device.

9 Factory Default Reset



Use this procedure only when the network primary controller is missing or otherwise inoperable.

1. When the roller shutter is in the lowermost position, press and hold T2 for more than 20 seconds.
2. The LED will alternately flash red and green for 5 seconds after a successful reset.

10 Configuration

Parameter	Description	Size (Bytes)	Value	Default
1	Enable/Disable Central scene notifications for 2x-5x press	1	0 - disable 1 - enable	1
2	Interval of current wattage meter report in 10 seconds	2	0 - disable unsolicited reports 3 ... 8640 (30 seconds - 1 day)	3 (30s)
3	Interval of active energy meter report in minutes	2	0 - disable unsolicited reports 10 ... 30240 (10 minutes - 3 weeks)	60 (1hour)
4	Manual shutter calibration (Shutter will move up, down and up again)	1	0 - idle 1 - start a manual shutter calibration	0

11 Supported Association Groups

ID	Name	Max group members	CC-Commands
1	Lifeline	1	<ul style="list-style-type: none">- Device Reset Locally Notification- Central Scene notification- Meter Report- Multilevel Switch Report- Notification Report
2	Switch State	10	<ul style="list-style-type: none">- Basic Set

12 Basic Command Class

This device controls members of association group 2 with Basic Command Class Set commands. The set commands mirror the device's state.

When the device is set to a multilevel value, the same value is send as a Basic Set to members in association group 2.

13 Notification Command Class

Notification Type	Notification Event	Description
Power Management (0x08)	Idle (0x00)	No event detected / event cleared
	Overload detected (0x08)	The maximum load on the outputs 1 or 2 to the shutter motor has been exceeded

14 Supported Command Classes documentation

Command Class	Version	Required Security Class
Association	2	highest granted
Association Group Information	1	highest granted
Basic	2	highest granted
Central Scene	3	highest granted
Configuration	1	highest granted
Device Reset Locally	1	highest granted

Firmware Update Meta Data	4	highest granted
Manufacturer Specific	2	highest granted
Meter	4	highest granted
Multilevel Switch	4	highest granted
Notification	8	highest granted
Powerlevel	1	highest granted
Security 0	1	none
Security 2	1	none
Supervision	1	none
Transport Service	2	none
Version	3	highest granted
Z-Wave Plus Info	2	none

15 Central Scene

The TechniSat Shutter can send central scene activation notifications to a Z-Wave gateway.

Pressing the respective button multiple times, will send the corresponding scene number:

Button	T1	T2	T3	T4
Scene number	1	2	3	4

The following Z-Wave key attributes are available for all scenes:

Button pressed	Z-Wave key attribute
two times	Key Pressed 2 times
three times	Key Pressed 3 times
four times	Key Pressed 4 times
five times	Key Pressed 5 times

16 Firmware update

This device supports firmware update via Z-Wave. For enhanced security, the device requires a manual confirmation, before an update of the device's firmware can be initiated.

To perform a firmware update follow these steps:

1. Follow your Z-Wave gateway's manual, on how to update the firmware of a Z-Wave device.
2. From your gateway issue a Z-Wave request to get the current firmware version of the device to be updated.
3. When the request has been received, your device's LED will glow red for 10 seconds.
4. While the LED glows red, press T1, T2, T3 or T4 to allow a firmware update - the LED will now glow green for 10 seconds.
5. While the LED glows green, start the device's firmware update from your gateway.

17 Technical Data

Product Key Features	In-wall mounted shutter control Z-Wave Plus Security S2 SmartStart compatible with German market wall switch product lines Overload protection
supply voltage	230 VAC +/- 10 %
line frequency	50 Hz +/- 10 %
rated load current of output (resistive load)	1,7 A
output circuit power (resistive load)	400 W
electricity consumption (without load)	< 0,4 W
operation altitude	< 2000 m NN
IEC protection class	Schutzklasse II
IP protection class	IP20

Z-Wave frequency transmission power	868,42 MHz 4 dBm
Status LED	<p>Red status LED is on during inclusion process</p> <p>Red blinking - overload protection</p> <p>Green LED is on for 5 s after succesful inclusion</p>
Ambient Conditions Operational	<p>Temperature: +5 °C to +35 °C</p> <p>Humidity: 10 % to 75 % RH</p>
Ambient Conditions Warehousing & Transport:	<p>Temperature: -20 °C to +60 °C</p> <p>Humidity: 5 % to 90 % RH non condensing</p>
Dimensions (WxHxD)	70 mm x 70 mm x 45 mm

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Caution!

If you encounter a problem with this equipment, please contact our Technical Hotline initially.

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