



## Z-Wave Protocol Implementation Conformance Statement

### IS 140-2 Z-Wave

#### General Information

**Product Identifier:** 40111677001  
**Brand Name:** Steinel GmbH  
**Product Version:** HW: 1 FW: 1.0:1.0  
**Z-Wave Certification #:** ZC10-17045540

#### Product Features

<b>IP (Ingress Protection) Rated</b>	Yes
<b>Firmware Updatable</b>	Updatable by Consumer by RF
<b>Outdoor Use</b>	Yes
<b>Neutral Wire Required</b>	Yes
<b>Sensors</b>	Luminance Motion/No Motion (Binary)
<b>Switch Load Capacity Volt-Ampere</b>	500
<b>Switch Load Capacity Watts</b>	1000
<b>Supported Notification Types</b>	Home Security System
<b>Electric Load Type</b>	(No feature option values set for this feature)

#### Z-Wave Product Information

Supports Z-Wave Beaming Technology?	Yes
Supports Z-Wave Network Security?	Yes
Supports Z-Wave AES-128 Security S0?	No
Supports Security S2?	No
SmartStart Compatible?	No

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### Z-Wave Technical Information

<b>Z-Wave Frequency:</b>	CEPT (Europe)
<b>Z-Wave Product ID:</b>	0x1A72
<b>Z-Wave Product Type:</b>	0x0002
<b>Z-Wave Hardware Platform:</b>	ZM5202
<b>Z-Wave Development Kit Version:</b>	6.51.09
<b>Z-Wave Library Type:</b>	Enhanced 232 Slave
<b>Z-Wave Device Type / Role Type:</b>	Notification Sensor / Always On Slave

### Association Group Information

**Group # / Max**    **Description**

#### Nodes

1 / 1	<p>Z-Wave Plus Lifeline Lifeline messages - Device Reset Locally - Notifications: 0x09 ( System ) – Hardware failure with manufacturer proprietary code ( 0x03 ) 0x09 ( System ) – Software failure with manufacturer proprietary code ( 0x04 ) 0x07 ( Home security ) – Motion Begin event ( 0x08 ) 0x07 ( Home security ) – Motion End event ( 0x00, 0x08 ) - Binary Switch Report – lamp state - Multilevel Sensor Report – value of internal ambient light sensor Motion Begin and Motion End events are sent along with frames to group 3. If multichannel association is created the events are sent from motion sensor endpoint. Switch Report is sent immediately upon a change of status along with frames to group 2. If multichannel association is created the events are sent from lamp endpoint. Multilevel Sensor Report is sent a maximum of once per 1 minute (if the value has changed by least by 3%) and a minimum of once per 15 minutes (if the value has not changed). If the ambient light value is old (cannot measure because of permanent light), the value is not transmitted via lifeline. Multilevel Sensor Report can be also added to some other events to send in bulk. If multichannel association is created the events are sent from light sensor endpoint. All notifications to lifeline are sent as sensor states regardless of sensor settings and states as SLAVE_MODE, LOCAL_DISABLED and MOTION_ENABLE.</p>
2 / 16	<p>On/Off Control -Basic Set Group 2 is used for directly controlling Z-Wave devices via BASIC SET commands through the evaluation of movement and light as with internal use ( so that all of these devices work together ). This is intended for use especially with third-party devices that do not implement reactions for motion events. BASIC_SET and similar Z-Wave commands are not retransmitted intentionally to slaves and must be sent to slave devices via the controlling device simultaneously. Only for use in master-slave system, multidevice control is not possible. Group 2 is evaluated and frames are transmitted there also in SLAVE_MODE, regardless of LOCAL_DISABLED state and when MOTION_ENABLE is off ( not using internal motion sensor just reacts for remote motion events then ). If multichannel association is created the events are send from motion sensor endpoint.</p>

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- 3 / 16 Motion begin/end - Notifications: 0x07 (Home security) – Motion Begin event (0x08) 0x07 (Home security) – Motion End event (0x00, 0x08) Group 3 sends MOTION\_BEGIN and MOTION\_END frames. MOTION\_BEGIN frame = Notification 0x07 ( Home security ) – Motion detection without location ( 0x08 ) MOTION\_END frame = Notification 0x07 ( Home security ) – After first motion detection MOTION\_BEGIN is sent. If continual movement is detected MOTION\_BEGIN is sent every 1 minute repeatedly. When motion ends, MOTION\_END is sent 5 seconds after the last motion detection. Notification to group 3 is sent only when NIGHT\_MODE = ON and MOTION\_ENABLE = ON, regardless of LOCAL\_DISABLE state. All devices in a group should have the same TIME settings in order that they switch off at the same time. If multichannel association is created the events are send from motion sensor endpoint.
- 4 / 16 Ambient light - Multilevel Sensor Report – value of internal ambient light sensor Ambient Light via group 4 is intended to substitute locally measured LUX values in target devices – so that the network can have one source of ambient light value. The frame rate is a value being sent a maximum of once per 2.5 minutes, and a minimum of once per 15 minutes. When device already uses remote Ambient light value, then this value is also retransmitted to group 4. All devices in such a group should have the same LIGHT ( threshold ) settings in order that night mode is detected at the same time. If multichannel association is created the events are send from light sensor endpoint.

#### Supported Command Classes (17):

Command Class Association Group Info	Command Class Association V2
Command Class Basic	Command Class Configuration
Command Class Device Reset Locally	Command Class Firmware Update Md V3
Command Class Manufacturer Specific	Command Class Multi Channel Association V3
Command Class Multi Channel V4	Command Class Node Naming
Command Class Notification V4	Command Class Powerlevel
Command Class Sensor Multilevel V4	Command Class Switch All
Command Class Switch Binary	Command Class Version V2
Command Class Z-Wave+ Info V2	

#### Controlled Command Classes (1):

Command Class Basic