

Z-Wave® Option Card and Driver



Overview

Tridium's Z-Wave® communication option card and driver create a portfolio of hardware, software and tools designed to monitor and control Z-Wave devices. It allows users to use the Z-Wave technology to create a wireless, two-way mesh network. This network allows complete control of a network of compatible devices throughout the building from a single JACE® running Niagara^{AX} version 3.5 or higher.

A JACE with the Z-Wave option card acts as a secondary Z-Wave controller, primary Z-Wave controllers will be required to address Z-Wave devices and then the process of replication transfers the Z-Wave network topology from the primary controller to the Z-Wave secondary controller. Z-Wave protocol provides the ability to operate a mesh network. Rather than depending solely on star topology communications like other technologies, Z-Wave is able to get around obstacles by routing commands through other devices in the network when required.

Applications

Z-Wave option card and driver allows rapid installation and control of home/small commercial automation systems of lighting, temperature control and security.

Features

The Z-Wave card is a plug-in option card designed to be installed in the option card socket of a JACE-2, JACE-6, JACE-7 or JACE-XPR series. In addition, the option card enables the JACE to integrate with Z-Wave devices as a secondary controller after replication has occurred from a third party primary Z-Wave controller.

- Plugs into standard JACE-2, JACE-6 JACE-7, or JACE-XPR series option card slot
- All necessary power is supplied by the JACE
- Device integration follows the standard Niagara Driver Framework architecture
- Diagnostic indicator LEDs provided for visual indication of operation
- Stub antenna included
- Optional antenna extension cable available for remote mounting of antenna

System Requirements

Niagara^{AX} version 3.5 or later running on a JACE-2, JACE-6 or JACE-XPR series with a Z-Wave interface module installed in the option card socket.

Specifications

- Data transfer with 40 kbps on 868.42 MHz (EU) or 908.42 MHz (US)
- High sensitivity of -94 dBm type
- -3 dBm max. output power, programmable over 23 dB range
- Standard temperature range -20°C to +70°C (on request -40°C to +85°C)
- 32k Flash and 2k RAM memory
- FCC and ETSI Certified

Ordering Information

Part Number	Description
T- DR-NPB-ZWAVE-US	Z-Wave card and driver bundle. Communicates over radio 908.42 MHz frequency at 40kps. Uses one of the two communication slots in the JACE- 2/6/7/XPR.
T- DR-NPB-ZWAVE-EU	Z-Wave card and driver bundle. Communicates over radio 868.42 MHz frequency at 40kps. Uses one of the two communication slots in the JACE- 2/6/7/XPR.
NPB-ZWAVE-US	Z-Wave card for North America. Communicates over radio 908.42 MHz frequency at 40kps. Uses one option card slot in the JACE- 2/6/7/XPR.
NPB-ZWAVE-EU	Z-Wave card for Europe. Communicates over radio 868.42 MHz frequency at 40kps. Uses one option card slot in the JACE- 2/6/7/XPR.
Z-WAVE-CBL-EXT	Optional two (2) meter extension cable with the mounting brackets to extend the antenna to boost the Z-Wave signal strength.
DR-ZWAVE-AX	Z-Wave software driver allows serial communication to Z-Wave option card or third party Z-Wave controller.

Architecture

