



# ZC-120 RS-485 to Z-Wave Converter

RS-485 (Recommended Standard 485) is a standard maintained by the Electronics Industry Alliance (EIA). RS-485, also known as TIA/EIA-485-A, was created to meet the needs of electronic component designers for longer cable lengths, increased throughput and control of multiple devices.

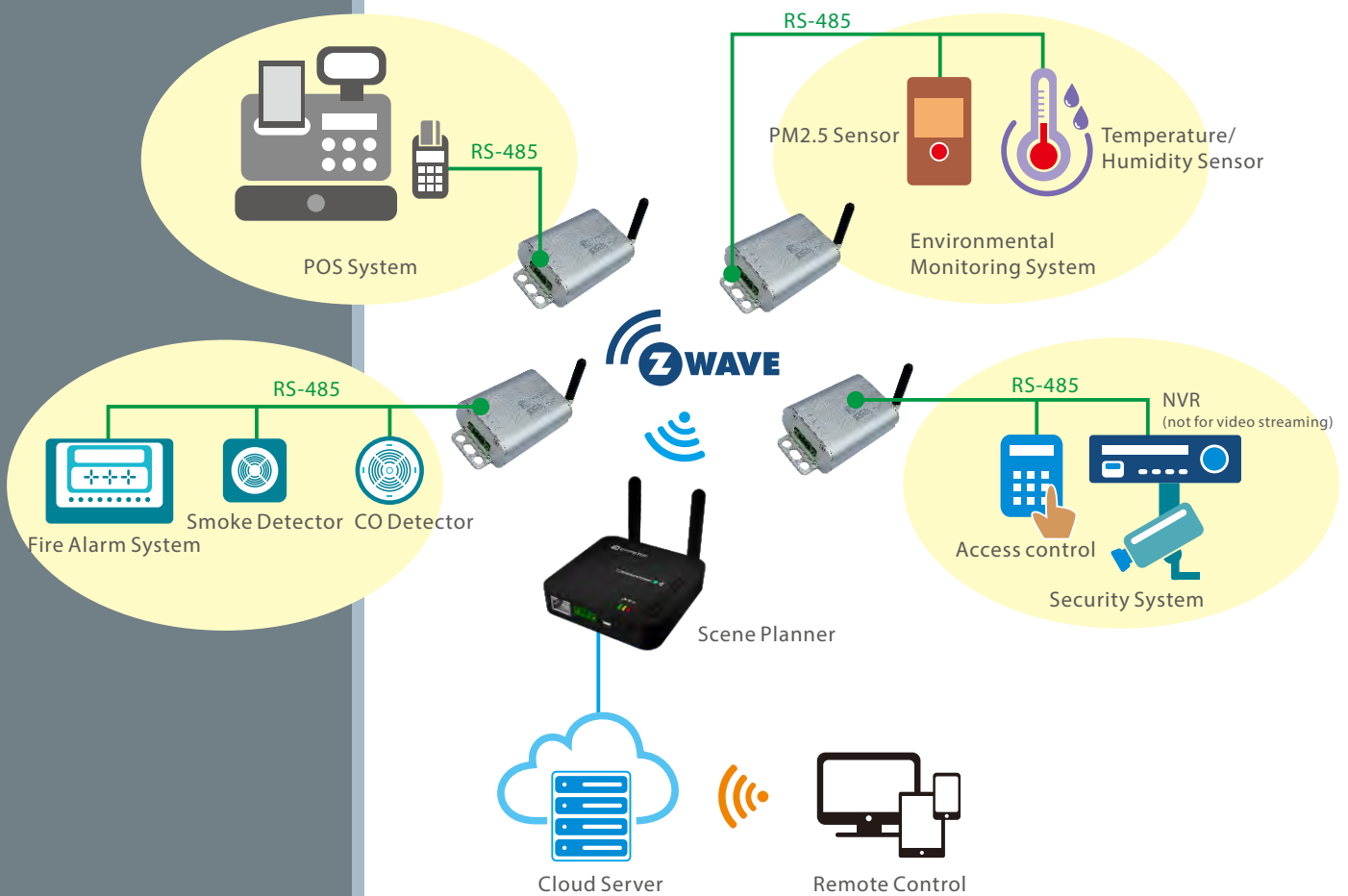
## Z-Wave to RS-485

The unique Z-Wave to RS-485 Converter is created to give the great wireless capability to those existing devices and products built with RS-485 communication ports. It provides an effective means to extend product lines without drastically redesigning existing products and systems. When Z-Wave to RS-485 Converter is used as the wireless link, existing products and systems may be extended with no disruption and easily to be included into a Z-Wave network.

Benefits:

- . **Include the non-ZWAVE products into a Z-Wave network**
- . **Ease of use and deployment**
- . **Cost effective**
- . **Extended range capabilities**
- . **Portability**
- . **Ease and flexibility of installation**





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EMPERS' RS-485 to Z-Wave converter is designed to offer the wireless connectivity to those existing products or equipment. With integrated connectivity, users may improve the efficiency, productivity and business benefit from their original management process.

Users may get information feedback from a centralized management system and then quicker to uncover or address any issue. This information helps them to find bugs, monitor equipment, software and firmware updates over-the-air and reduce maintenance and eventually to increase the productivity.

### Gain Real-Time Diagnostics

Limit down-time through real-time collection and monitoring of data.

### Lower Installation Costs

Eliminate unnecessary wiring and infrastructure costs and lower installation times dramatically.

### Increase Worker Safety

Increase worker safety and lower insurance rates by using wireless systems and sensors in dangerous work environments.

### Reduce Maintenance Costs

Limit the amount of unscheduled, on-site maintenance through remote asset visibility.

### Features

- ◆ Wall and DIN-rail mounting
- ◆ Plug-in terminal block for easy RS-485 wiring
- ◆ LED indicators for Power, TX, RX
- ◆ RS-485 transceiver (half-duplex) with auto direction

### Specification

#### Radio Z-Wave

Radio Transceiver	Receiver sensitivity without SAW filter down to -105dBm@9.6kbps Transmit mpower without SAW filter up to +6dBm
	Z-Wave 9.6/40/100kbps data rates
	Supports all Z-Wave sub-1 GHz frequency

#### RS-485 Side

Connector	Terminal Block
Signals	RS-485-2w: Data+, Data-, GND
RS-485 Data Direction Control	ADDC® (Automatic Data Direction Control)

#### Z-Wave Communication

Baudrate	9.6/40/100kbps data rates
Output Power	-21~+2.5dBm
High Sensitivity	-99dBm@9.6kbit/s, -97dBm@40kbit/s, -93dBm@100kbit/s

#### Appearance

Dimension	94x56x27mm(LxWxH), 220 Gram
Housing Material	Aluminum
Color	Silver

#### Environmental Limits Operating

Operating Temperature	-20 to 70°C
Storage Temperature	-40 to 85°C
Ambient Relative Humidity	5 to 95% (non-condensing)

#### Power Requirements

Source of Input Power	Terminal Block
Input Voltage	12V DC
Input Current	85mA @ 12V DC
ESD Protection	Protects against two signals shorted together

# ZC-120 RS-485 to Z-Wave Converter

1. RS-485 connector
2. Antenna
3. Wall mount
4. Pairing button
5. LED light



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