Z920K

::: RS485/RS232 to Wireless Mesh Converter :::

Outdoor P-to-P range 500m (at a visible direct line)	((•))	Radio frequency band 920MHz	
Network Capacity Max 100 nodes		Max Receiver Sensitivity -103 dBm	
Topology Mesh (Max 16 hops)		Console APP (BLE/NFC) / Windows Utility (micro USB)	

GENERAL DESCRIPTION

ZOTECH Z920K series are able to easily wireless those messy RS485 / RS232C wirings for Industrial IoT, smart building or other IoT applications. Z920K-P/Z920K-C support Modbus/RTU or ASCII, and feature a low power consumption, long-range and robust wireless mesh links. Z920K 920Mhz radio frequency has a strong capability to desensitize with interferes to make it as a perfect solution for a wireless data transferring. The major advantage of Z920K is the original control/data collect systems and sensing equipments can be kept reused to save cost and time for a mesh network establish. As well, Z920K configuration can be done through BLE/NFC console APP or a Windows utility. The APP equips the functions of the quick installation and the fast NFC data read/write. It will be much helpful for users to build the mesh network at sites. Z920K can be easily and widely used for the different IOT applications.

Common Features
・Compatible with IEEE 802.15.4g
・Modulation GFSK
・Transmit Bandwidth 400KHz
・Max Receiver Sensitivity -103 dBm
・Maximum data rate 100 kbps
・Transmit output power 0.16mW/1mW/20mW
・Encryption 128bits AES (MAC)
・LED indicators: PWR/LINK/NETWORK/RSSI/TX/RX
・External Antenna 920-928Mhz/+3dBi
・Operation: Normal mode/Measurement mode
・Operating Temperature-20°C~+70°C
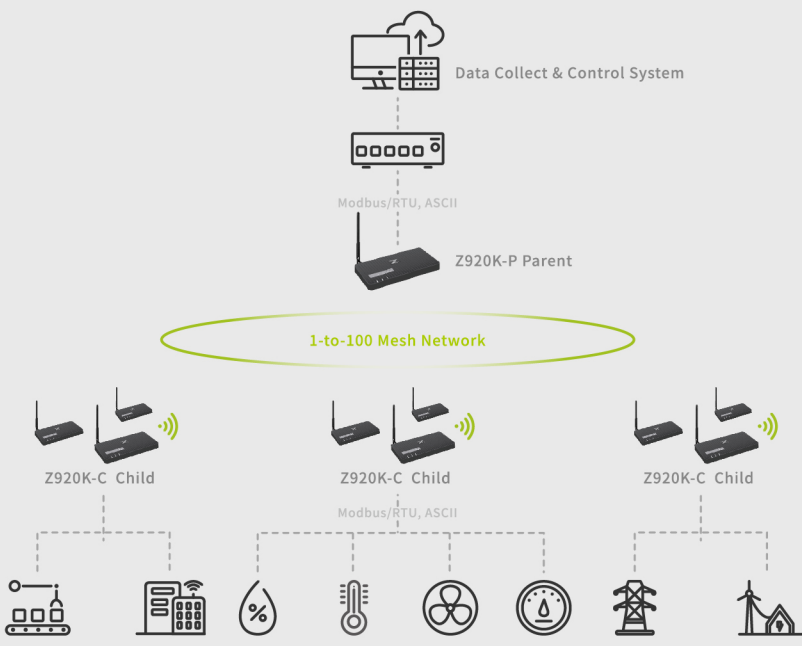・Operating Humidity 20~85% RH
・Mechanical: 12cm/6cm/2.5cm (L/W/H)

Serial Port
・Port Type RS485-2W/RS485-4W/RS422 (Terminal) or RS232 (D-sub 9)
・Protocol Modbus/RTU, ASCII code
・Baud Rate 1200/2400/4800/9600/14400/19200/38400/57600/115200 bps
・DIP Switch (Baud rate/Parity/Stop bit)
・Max RS485 in-serial Connections 31
・Pull high/low impedance terminator for RS422/485

Power
・USB Bus Power DC 5V in
・DC/AC In Unregulated 10-48Vdc in/ 10-24Vac in
・DC Out 12Vdc out (A power adaptor has to be used)

APPLICATION SCENARIO

Data Collect & Control System

Modbus/RTU, ASCII

Z920K-P Parent

1-to-100 Mesh Network

Z920K-C Child   Z920K-C Child   Z920K-C Child

Modbus/RTU, ASCII

Data Collect and Control

Keep the Same System and Sensors / Wiring to Wireless Quickly and Easily
Long Distance Mesh Network / Sub-1G High Penetration

CONSOLE APP FEATURES

Configuration
・Basic configuration setting
・Communication setting

Quick Installation
・New Network
・Add devices

NFC
・Authentication
・Get/Write configuration

Enhanced Data Security

Measurement Tool
・Channel Scanning
・PER/RSSI measurement