

Z1

5G Industrial Outdoor Gateway



Overview

With powerful data collection, storage, analysis and processing capabilities, Z1 5G Industrial Outdoor Gateway is mainly aimed at the industrial sector and can also be used for indoor and outdoor network coverage, providing customers with a total solution for device networking, edge computing and intelligent operation and maintenance.

Highlights



Excellent WiFi Coverage

Support new generation 802.11ac Wave2 and dual-band 2x2 MU-MIMO
Equipped with IPQ40X9 LTE/NR CPE



High Stability

Fully industrial grade hardware platform with 4 core high performance CPU
Support wired, WLAN, 4G/5G multi-network access



Multiple Mounting Options

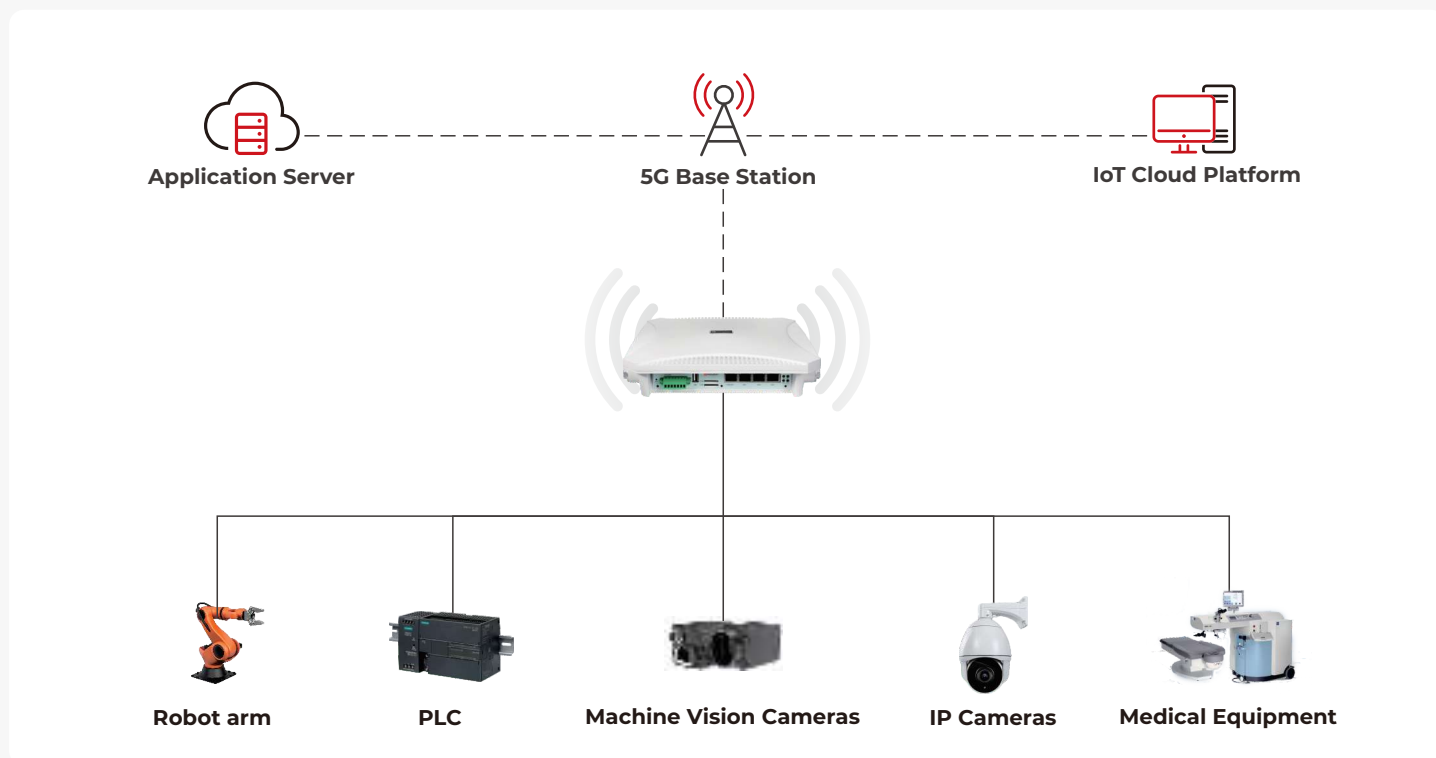
Support ceiling-mounted installation



Industrial Standard Design

Wide temperature and input voltage range, above IP66 protection level

Topology diagram



Smart Manufacturing



Smart Factory



Smart Ports



Smart Healthcare

Features



Enhanced 5G download rate



Dividing VLAN, network isolation



IP66 protection

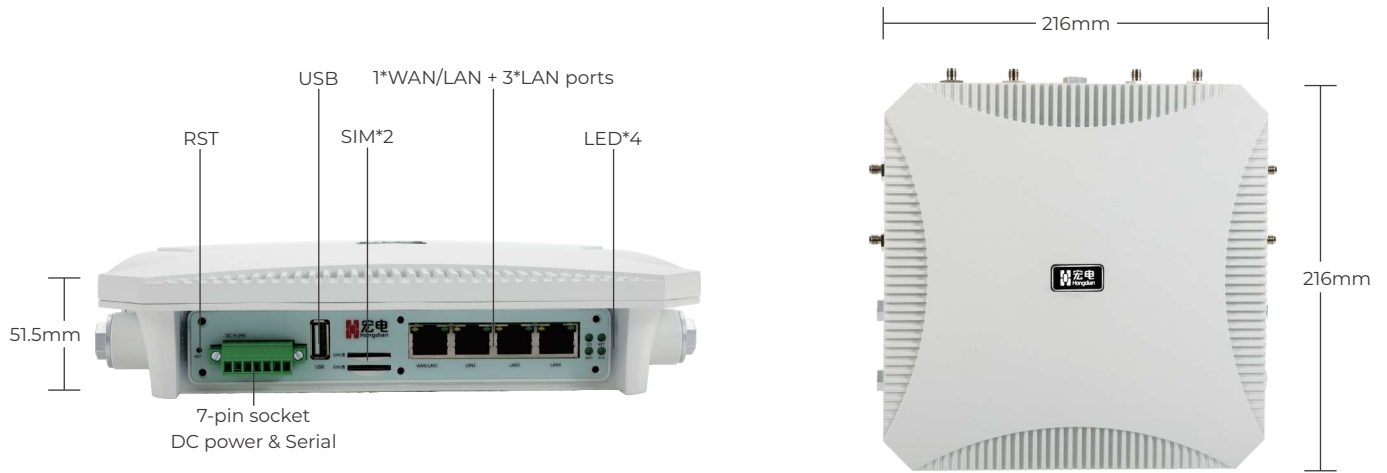


Support Hongdian Wedora RMS for cloud based management

Specification

Hardware			
CPU	Quad-core ARM Cortex A7, 717MHz		
RAM	512MB	FLASH	32MB+8GB eMMC
SD Card	Built-in TF card slot	USB	USB2.0
Cellular Interface			
Modem	1 × 5G NR SA/NSA	Number of Antennas	4
SIM	2 × Mini SIM (2FF)	Connector	SMA-K
Wireless Interface			
Standards	802.11b/g/n/ac, AP or station modes	Frequency Bands	2.4 GHz & 5 GHz
Speed	1167Mbps	Security	WEP, WPA, WPA2
Encryption	64/128 AES, TKIP	Antennas	4
Connector	SMA-K		
GNSS Interface			
Number of Antennas	1 (only for GPS version)	Connector	SMA-K with 50 ohms impedance
Dead Reckoning	Optional		
Peripheral Interface			
Ethernet	3 × LAN 10/100/1000 Mbps + 1 × WAN/LAN 10/100/1000 Mbps, Gigabit Ethernet		
Serial Type	1 × RS-232 + 1 × RS-485 serial port	Socket Form	1 × 7-pin 3.5 mm female socket
Signal Definition	RX, TX, GND (RS-232) , A+, B-, GND (RS-485)	SD Card	Built-in TF Card Slot
Baudrate	RS-232 (300-115200bps), RS-485 (300-115200bps)		
USB	USB2.0		
Software			
Auto Fail-over	Between: Cellular and WAN, Cellular and Wi-Fi (station mode), WAN and Wi-Fi (station mode)		
Network Protocols	PPP, PPPoE, TCP, UDP, IPv4, IPv6, SSL, DHCP, ICMP, NAT, HTTP, HTTPS, DNS, ARP, NTP, Telnet, SSH, DDNS, etc.		
Routing	Static Routing, Policy routing, RIP, OSPF and BGP, etc		
Firewall	NAT, PAT, DMZ, Port Forward IP/Domain/MAC Filter, Access Control List		
VPN	PPTP/L2TP/GRE/IPSec/OpenVPN/DMVPN		
Remote Management	HTTP, Telnet, SSH, SMS, SNMP V1/V2/V3, SNMP TRAP, Hongdian Wedora Cloud Platform		
Serial Ports Function	Transparent, Modbus RTU, etc		
Power Supply and Consumption			
Connector	2 pin socket	Voltage Input	+9V~+24V DC
Power Consumption	Idle: 450mA@12V DC, Data transceiving: 2.2A@12V DC		
Others			
Reset Button	Yes	Hardware Watchdog	Yes
LED Indicators	4 indicators for WiFi, SIG, NET, SYS		
Physical Characteristics			
Ingress Protection	IP66	Housing & Weight	Metal, 1860g
Dimension	216×216×51.5(mm)	Installations	Desktop, wall mounting and DIN rail mounting
Operating Temperature	-30 ~ +70 °C	Storage Temperature	-40 ~ +85 °C
Relative Humidity	5 ~ 95%		

Appearance



Ordering info

Model	Bands	5G modem	WLAN	RJ45	RS232	RS485	Region
Z1-N005-4W-4R-CS	NSA/SA: n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48/n66/n71/n77/n78/n79 LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12(B17)/B13/B14/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71 LTE-TDD: B34/B38/B39/B40/B41/B42/B43/B48 LTE DL 4*4 MIMO: B1/B2/B3/B4/B7/B25/B30/B32/B34/B38/39/B40/B41/B42/B43/B48/B66 LAA: B46(only support 2*2 MIMO) WCDMA: B1/B2/B3/B4/B5/B6/B8/B19	1*modem	4*4G Antenna	4*RJ45 Cable	1*RS232	1*RS485	Global

Packing list

