

Z2

5G Industrial Gateway



Overview

Z2 Industrial Cellular Gateway is a new generation of 5G gateway with edge computing capability. Its built-in 4-core high-performance processor supports floating point computing and built-in embedded memory, external TF card interface support local storage and data processing. The open software architecture design provides fast and flexible customization, rich and diverse interfaces, local real-time data analysis and intelligent processing with strong temperature, electromagnetic resistant and is able to adapt to different industry scenarios.

Highlights



High Performance

With powerful data processing and computing capabilities
Supports local data storage and analysis decision



High Stability

With wide temperature and resistance to strong electromagnetic interference



Efficient Operation and Maintenance

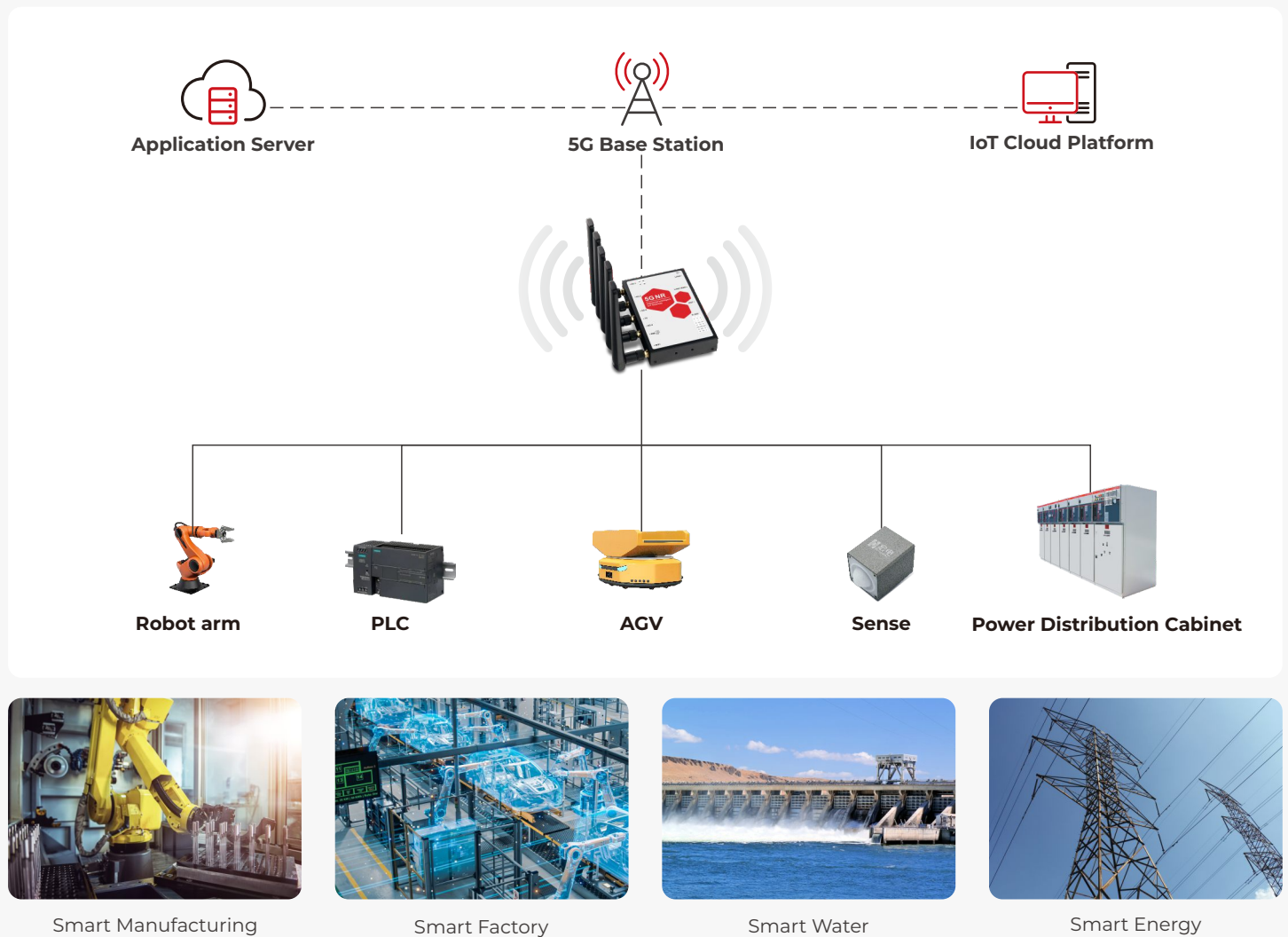
Support Hongdian Wedora platform



Industrial Standard Design

Wide temperature and input voltage range,
IP40 protection level

Topology diagram



Features



Data acquisition and transmission capability

Rich peripheral interfaces, compatible with mainstream industrial protocols



Secure networking

Support VPDN, APN private network input, IPV6/IPV4 dual stack
Support IPSec, L2TP, GRE, ICMP detection heartbeat packet detection function, support online detection recovery



5G ultra-high-speed network

Support for frequency locking, cell locking, support for 5G/4G, WiFi wired multi-network simultaneous access, multi-network backup switching



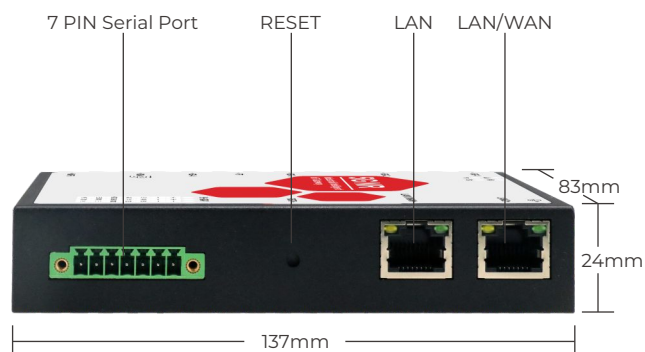
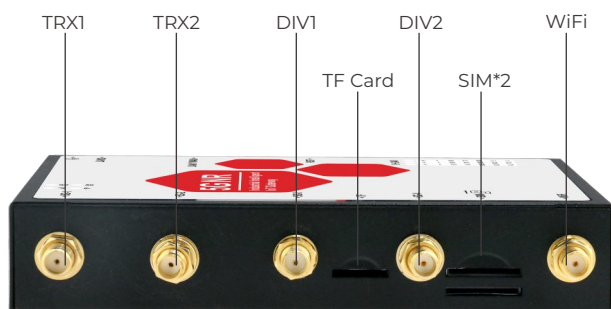
VLAN

Dividing VLAN, network isolation
Support bridging, port forwarding and other functions
Support VXLAN function

Specification

Hardware			
CPU	Quad-core ARM Cortex A7, 717MHz	RAM	512MB
FLASH	32MB	SD Card	TF Card Slot
Cellular Interface			
Modem	1 × 5G NR SA/NSA		
Number of Antennas	4 (MAIN + AUX)	Module Integration	M.2
SIM	2 × Mini SIM (2FF)	Connector	SMA-K
Ethernet Interface			
Number of Ports	2 × 10/100/1000 Mbps, Gigabit Ethernet	Configuration	2 × LAN / 1 × LAN + 1 × WAN
Wireless Interface			
Standards	802.11b/g/n, AP or station modes	Frequency Bands	2.4 GHz
Speed	150Mbps	Security	WPA, WPA2
Encryption	64/128 AES, TKIP	Antennas	1 (only for WiFi version)
Connector	SMA-K		
GNSS Interface			
Number of Antennas	1 (only for GPS version)	Connector	SMA-K with 50 ohms impedance
Seiral Interface			
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)	ESD	15KV
Baudrate	RS-232 (300-115200bps), RS-485 (300-115200bps)		
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, DHCP, ICMP, NAT, HTTP, HTTPS, DNS, ARP, NTP, SMTP, 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: 350mA@12V DC, Data transceiving: 1.3A@12V DC		
Others			
Reset Button	Yes	Hardware Watchdog	Yes
LED Indicators	4 indicators for WiFi, SIG, NET, SYS		
Physical Characteristics			
Ingress Protection	IP40	Housing & Weight	Metal, 290g
Dimension	137.0×83.0×24.0(mm)	Installations	Desktop, wall mounting and DIN rail mounting
Operating Temperature	-30 ~ +70 °C	Storage Temperature	-40 ~ +85 °C
Relative Humidity	5 ~ 95% RH	Certifications	CE*, FCC* (*In progress)




Appearance



Ordering info

Model	Bands	5G modem	WLAN	RJ45	RS232	RS485	Region
Z2-N005-W-2R-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	1*4G Antenna	2*RJ45 Cable	1*RS232	1*RS485	Global

Packing list

 <p>Packing box</p>	 <p>Z2 5G Industrial Gateway</p>	 <p>4×NR antennas</p>
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1×WiFi antennas



1×Ethernet cable



Mounting kits