



H8890

5G Outdoor Router



Overview

H8890 is a durable 5G outdoor router built for reliable connectivity in demanding environments. Supports advanced indoor and outdoor network coverage with 5G, WiFi6 and IP66-rated housing. Supports dual SIM with automatic switching, and eSIM optional, provide exceptional network flexibility and redundancy. Gigabit Ethernet ports with PoE-in and PoE-out simplify setup by combining power and data in a single cable. Besides, it can be managed by Hongdian Sandora platform with SD-WAN networking, remote access anytime anywhere, making it perfect for outdoor connectivity solutions.

Highlights



Excellent WiFi Coverage

Support 802.11ax and dual-band 2x2 MU-MIMO



Perfect PoE Port

Support PoE-in and PoE-out (802.3af/at)



Industrial Standard Design

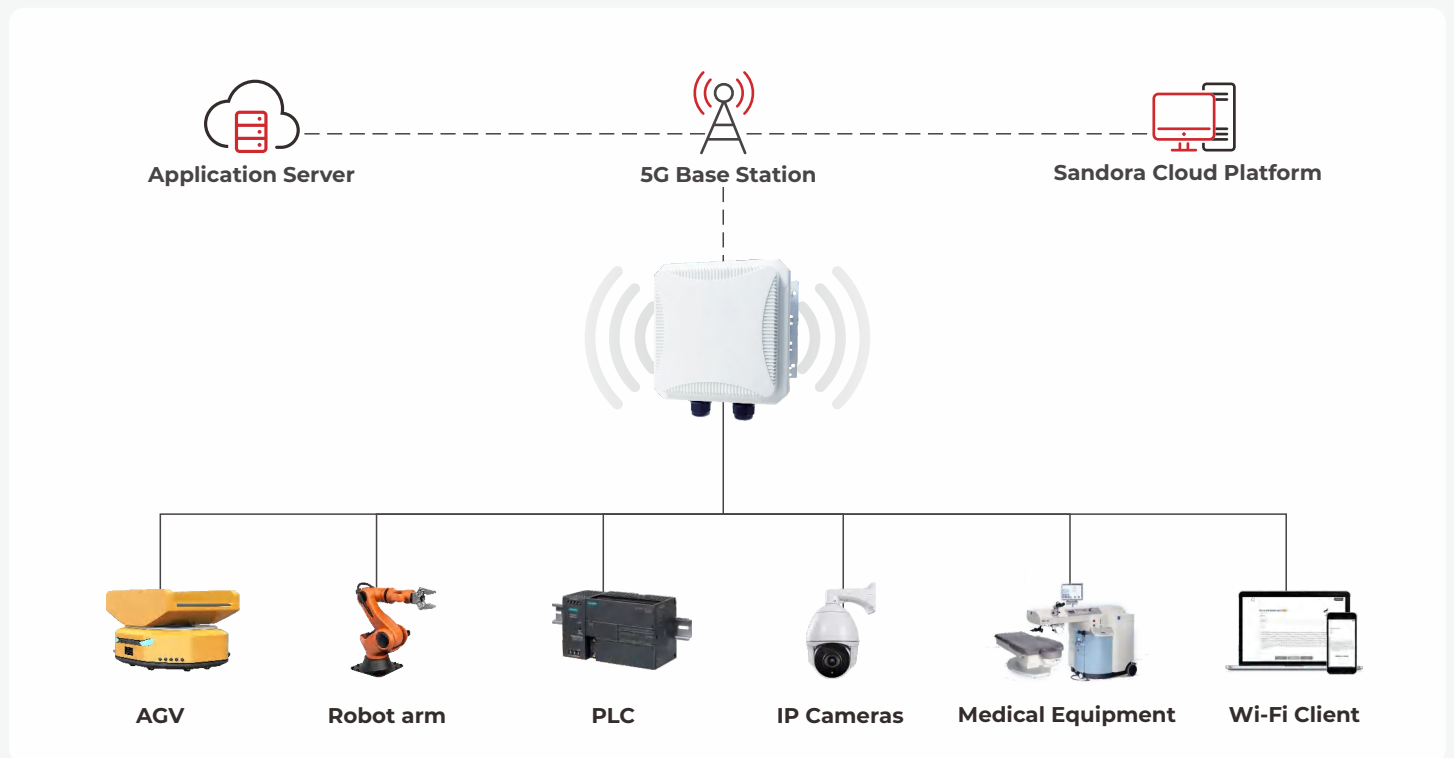
Wide temperature and input voltage range, above IP66 protection level



Cloud Management

Managed by Hongdian Sandora Platform with SD-WAN networking, remote access anytime anywhere

Topology diagram



Smart Manufacturing



Smart Factory



Smart Healthcare



SOHO (Small Office and Home Office)

Appearance



Specification







Hardware			
CPU	Dual-core, 1.35 GHz, ARM Cortex A53		
RAM	512MB	FLASH	32MB
Cellular Interface			
Modem	1 × 5G NR SA/NSA	Number of Antennas	4
SIM	2 × Mini SIM (2FF) (eSIM Optional)	Connector	SMA-K
Ethernet Interface			
Number of ports	4 × 10/100/1000 Mbps, Gigabit Ethernet		
Configuration	3 × LAN + 1 × WAN/LAN	PoE output	POE+(802.3af) 15W output×2, input×1
Wireless Interface			
Standards	802.11b/g/n/ac/ax, AP or station mode		
Speed	2402Mbps on 5GHz, 576Mbps on 2.4GHz	Frequency Bands	2.4 GHz & 5 GHz
Encryption	64/128 AES, TKIP	Security	WEP, WPA, WPA2
Connector	Internal		
GNSS Interface			
Number of Antennas	1 (only for GPS version)	Connector	SMA-K with 50 ohms impedance
Serial interface			
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.		
Network	APN, VLAN, VXLAN, QoS		
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/VXLAN/Wireguard		
Industrial Protocols	Modbus, OPC UA, BACNet/IP, IEC101/104, IEC61850, etc		
Remote Management	HTTP, Telnet, SSH, SMS, SNMP V1/V2/V3, SNMP TRAP, Hongdian Sandora Platform, SDLAN		
Serial Ports Function	Transparent, Modbus RTU, etc		
Power Supply and Consumption			
Power Connector	2 pin socket	Voltage Input	+9V~+48V DC
Power Consumption	Idle: 325mA@12V DC, Data transceiving: 708mA@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, 1700g
Installations	Desktop, pole mounting, wall mounting and surface mounting		
Operating Temperature	-40 ~ +75 °C	Storage Temperature	-40 ~ +85 °C
Dimension	221×221×82(mm)	Relative Humidity	5 ~ 95%

Ordering info

Part No.	Modem	Band	Region*	RS-485	Wi-Fi	GNSS	Ethernet
H8890-NRGL-PE-2WG	Single 5G NR	NSA/SA: n1/2/3/5/7/8/12/13/14/18/20/25/26/28/29/30/38/40/41/48/66/70/71/75/76/77/78/79 LTE-FDD: B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/30/32/66/71 LTE-TDD: B34/38/39/40/41/42/43/48 LAA: B45 WCDMA: B1/2/4/5/8/19	GL	2	802.11ax 2x2 MU-MIMO	•	4
H8890-NREU-PE-2WG	Single 5G NR	NSA/SA: n1/3/5/7/8/20/28/38/40/41/71/75/76/77/78 LTE-FDD: B1/3/5/7/8/20/28/32/71 LTE-TDD: B38/40/41/42/43 WCDMA: B1/5/8	EU	2	802.11ax 2x2 MU-MIMO	•	4
H8890-NREA-PE-2WG	Single 5G NR	1076-00400 G200U-CNVI R16, NSA: n78/79, SA: n1/3/5/8/28/41/77/78/79 LTE FDD: B1/3/5/8, LTE TDD: B34/38/39/40/41, WCDMA: B1/8 1076-00360 RG200U-CNVI R15, NSA: n78/79, SA: n1/3/5/8/28/41/77/78/79 LTE FDD: B1/3/5/8, LTE TDD: B34/38/39/40/41, WCDMA: B1/8 1076-10100 RG200U-CNV3GA R15, NSA: n78, SA: n1/3/5/8/28/41/77/78 LTE FDD: B1/3/5/8, LTE TDD: B34/38/39/40/41, WCDMA: B1/8	EA	2	802.11ax 2x2 MU-MIMO	•	4

* GL-Global, EU-EMEA (Europe, the Middle East, Africa)/APAC (Non-CN/JP)/Brazil, EA-EMEA (Europe, the Middle East, Africa)/APAC

Packing list

		
Packing Box	H8890 5G Outdoor Router	Power Adaptor (Optional)
		
RJ45 Cable	Installation Toolkit	Waterproof Components