

RELIABLE SECURE CONNECTIVITY

XWR8500G Series

Industrial LTE 5G cellular Gigabit Router, Dual Modules





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FEATURE HIGHLIGHTS

- High-performance industrial-grade wireless module / 32-bit communication processor
- Metal shell, protection grade IP30. Metal housing and system safety isolation, Wide power input DC 9~36V
- WDT Watchdog design to ensure system stability
- Adopt a complete anti-drop mechanism to ensure that the data terminal is always online
- Built-in 1.5KV electromagnetic isolation protection for Ethernet interface RS232/RS485 interface power and data isolation, in line with CSA, UL and IEC standards
- SIM/UIM card interface built-in 15KV ESD protection
- Built-in reverse phase protection and over-voltage protection for power interface
- Standard RS232, RS485, Ethernet and WIFI Interface, Standard WAN port (support standard PPPOE protocol), which can be directly connected to ADSL equipment
- Intelligent data terminal, can enter data transmission state after power on Easy to use, flexible, multiple working mode options
- Convenient system configuration and maintenance interface (WEB/CLI) Support wall-mounted, pole-mounted installation
- Support 5G LAN
- Intelligent dual 5G switching
- Implements smart load balancing for efficient data traffic distribution Intelligent switching backup for 3G/4G/5G and wired WAN dual links Supports VPN, PPTP/L2TP/IPSEC/GRE/OPENVPN
- Enables remote management with SYSLOG, SNMP, TELNET, SSHD, HTTPS Includes SPI firewall, VPN passthrough, access control, and URL filtering
- Various encryption methods supported for WiFi, including WEP, WPA, WPA2, etc. SIM/UIM card interface with built-in 15KV ESD protection
- Supports frequency & cell locking, EOIP, bridge mode, VxLAN, virtual IP, etc. Multiple DHCP servers, DHCP binding by MAC address, DDNS, firewall, NAT, etc. VLAN support, MAC address cloning, and PPPoE server
- Offers various online/offline trigger modes, including SMS, phone ringing, etc.





PRODUCT DESCRIPTION

XWR8500G is a dual SIM, dual-module 5G IoT wireless communication router, utilizing public 3G/4G/5G networks for long-distance data transmission. It features a high-performance industrial-grade 32-bit processor and wireless module, operating on an embedded real-time OS. With four Gigabit Ethernet LAN ports, one Gigabit Ethernet WAN/LAN port, USB, and console ports, it connects both Ethernet and Wi-Fi devices for transparent data transfer. Supporting features like WIFI6, VxLAN, and dual-card dual-mode (5G network), it enables smart dual-link switching and routing.



SPECIFICATIONS

Cellular Specification	
Module	Industrial grade wireless module
Frequency	5G NR NSA : n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/n77/n78/n79 5G NR 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/B9/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71 LTE-TDD : B34/B38/39/B40/B41/B42/B43/B48 WCDMA : B1/B2/B3/B4/B5/B6/B8/B19
Bandwidth	5G SA Sub-6: DL 2.0 Gbps; UL 766 Mbps 5G NR ENDC: DL 2.2 Gbps; UL 458 Mbps LTE: DL 487 Mbps; UL 150 Mbps WCDMA: DL 42 Mbps; UL 11 Mbps
Hardware System	
CPU	CPU@880MHz, dual core
TF	8GB EMMC
DDR3	512MB
Flash	32MB
WIFI	WIFI 6 Chip
Cellular Module	Dual cellular module
Basic Function	
VxLAN	Support
Dual-SIM Dual-Module	Support
VPN	PPTP/L2TP/IPSEC/GRE/OPENVPN
Load Balancing	Support*
Aggregation	Dual SIM card aggregation function* + aggregation server*
Power Supply	
Power Standard	DC 12V/1.5A
Range	DC 9~36V
Operate Current	< 1.1A (12V)
WIFI	
Wi-Fi Protocol	IEEE802.11 a/b/g/n/ac/ax (WIFI 6)
Frequency Band	2.4GHz+5GHz
Theoretical Max Bandwidth	2.4GHz 2x2MIMO 11ax (WIFI 6), 0.573 Gbps 5.8GHz 2x2MIMO 11ax (WIFI 6), 1.2 Gbps
Frequency Band	20MHz, 40MHz, 80MHz
Mesh Networking	Supports Mesh Networking with Four-Faith CPE/IDU devices



Interfaces	
WAN	1 x 1G Ethernet (RJ45), Adaptive MDI/MDIX
LAN	4 x 1G Ethernet (RJ45), Adaptive MDI/MDIX
USB	1 x USB 2.0
Indicators	Signal, Online1, Online2, WIFI, SYS, PWR
SIM	Standard drawer-type SIM card interface, compatible with patch eSIM
Power	Three-core DC locomotive power socket with built-in power inversion protection
Reset	Restoring the parameter configuration to the factory default value
Physical Characteristic	
Casing	Metal casing IP30
Dimension	176x124.5x45mm
Weight	800g
Operate Temperature	-35~+75°C
Storage Temperature	-40~+85°C
Humidity	95% (No condensation)





ORDER INFORMATION

Model	Cellular	Ethernet	SFP	Wi-Fi	SIM	GPS	I/O
XWR8550G-2MD	LTE 5G NR	5	0	1	2	0	0





WHO WE ARE

Built on 20 years of experience in designing and manufacturing industrial networking products, **Agatel** was established from the UK to serve the infrastructure and industrial sectors in EMEA markets with reliable connectivity for mission-critical systems in demanding environments.

Experienced in hardware and software design and integration, we produce high-quality yet cost-effective industrial networking and communication products with great customization capabilities and robust implementations, equipping our customers for reliable secure industrial networks.



WHAT WE OFFER

The needs of our customers' industry are different from those of corporate IT environments – industrial operating environments are tough and the impact of failure in the field can lead to business threatening situations, hence our products will have lifetimes in excess of 20 years.

From entry-level to high-performance industry-certified hardware, **Agatel** offers a full solution spectrum to suit our customers' budgets and application requirements, with features such as industrial-grade reliability, integrated security, network redundancy, and advanced performance.

Our product solution profile includes industrial Ethernet switches, network time servers, media converters, industrial wireless devices, and serial device servers, covering a wide array of mission-critical applications such as automation, security, transport, water, oil and gas, and power grids.



WHY CHOOSE US

We help our customers reduce downtime and operational costs of their industrial applications in harsh environments. Leading system integrators in EMEA rely on our niche technical expertise and product quality to increase their applications' robustness, revenues, and competitive differentiation.

Agatel ruggedized high-quality solutions are designed to deliver zero-network-downtime for harsh project demands, allowing for reliable connectivity to keep people and assets safe and secure in harsh and hazardous environments, and allowing customers to focus on growing their business.

Agatel Ltd

1st Floor, Apex House
Calthorpe Road, Edgbaston
Birmingham B15 1TR
United Kingdom

Tel: +44 121 809 8855
E-mail: info@agatel.co.uk
Website: www.agatel.co.uk

