

Industrial 5G NR Cellular Gateway with 5-Port 10/100/1000T



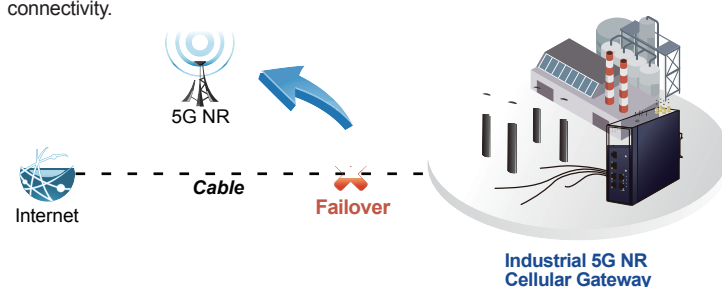
Upgrade Industrial Network with 5G NR Cellular Gateway

PLANET ICG-2515-NR is an industrial-grade cellular gateway for demanding mobile applications, M2M (machine-to-machine) and IoT deployments. Upgraded to the latest cellular technology of 5G NR (new radio), the ICG-2515-NR is able to provide ultra-fast broadband access with 5G cellular network. The ICG-2515-NR also features five Ethernet ports (4 LANs and 1 WAN), serial port (RS485), DI and DO interfaces, and VPN technology bundled in a compact yet rugged metal case. It establishes a fast cellular connection between Ethernet and serial port equipped devices. The ICG-2515-NR is particularly ideal for industrial automation, digital factory and other industrial applications.



Automatic Failover between 5G NR and Gigabit WAN

Designed with 5G NR and Gigabit Ethernet WAN interfaces, the ICG-2515-NR ensures Internet connectivity by featuring failover functionality between 5G NR and GbE WAN. The ICG-2515-NR provides flexibility to set priority for 5G NR or GbE WAN connection. When the main WAN interface fails, the secondary WAN interface will automatically back up the connection to ensure always-on connectivity.



Highlights

- Global 5G NR (NSA/SA)/4G LTE network with dual SIM design for cellular network redundancy
- Automatic failover between 5G NR and Gigabit WAN
- 2 x DI/DO and 1 serial port (RS485) for Modbus applications
- SSL VPN and robust hybrid VPN (IPSec/PPTP/L2TP over IPSec)
- Stateful packet inspection (SPI) firewall and content filtering
- Blocks DoS/DDOS attack, port range forwarding
- High Availability, AP Controller, Captive Portal and RADIUS
- Planet NMS controller system and CloudViewer app supported
- -45 to 75 degrees C operating temperature; DIN-rail and fanless designs

Hardware

- 4 x 10/100/1000BASE-T RJ45 LAN ports, auto-negotiation, auto MDI/MDI-X
- 1 x 10/100/1000BASE-T RJ45 WAN port, auto-negotiation, auto MDI/MDI-X
- 4 x 5G NR antennas
- 2 x SIM card slots
- 1 x serial console port (RS485)
- 1 x reset button

Cellular Interface

- Supports multi-band connectivity with 5G NR (NSA/SA), LTE-FDD, LTE-TDD, and WCDMA
- Built-in SIM and broadband backup for network redundancy
- Four detachable antennas for 5G NR connection
- LED indicators for signal strength and connection status

IP Routing Feature

- Static Route
- Dynamic Route
- OSPF

Firewall Security

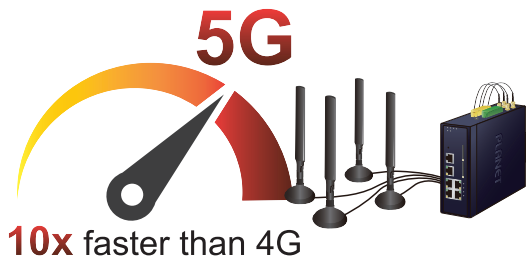
- Cybersecurity
- Stateful Packet Inspection (SPI) firewall
- Blocks DoS/DDoS attack
- Content Filtering

Ultra-Fast Speed 4G/5G Network*

The ICG-2515-NR supports 5G NR DL speeds higher than 2.4 Gbps and 4G LTE DL speeds of up to 1 Gbps. The wide spectrum bandwidth accelerates internet speeds and reduces network latency for premium and time-sensitive connectivity services. The ICG-2515-NR also supports multi-band connectivity including LTE FDD/TDD, WCDMA and GSM for a wide range of applications.

*The real 5G NR/4G LTE data rate is dependent on local service provider.

Up to download speed **2.4 Gbps**



Dual SIM Design

To enhance reliability, the ICG-2515-NR is equipped with dual SIM slots that support failover and roaming over to ensure uninterrupted connectivity for mission-critical cellular communications. Besides, the ICG-2515-NR supports load balance function to improve network efficiency. It provides a more flexible and easier way for users to create an instant network sharing service via 5G-NR in public places like transportations, outdoor events, etc.



Dual 5G NR

GPS Included

The ICG-2515-NR is equipped with (global positioning system) feature. It adapts 5G-NR technology to incorporate multiple global navigation systems (GPS/GLONASS/BeiDou/Galileo/QZSS). It helps to position location of cellular gateway based on a network of satellites that continuously transmits necessary data. More signals transmitted from more satellites can triangulate its location on the ground, meaning any location can be easily tracked.

GNSS Positioning



- MAC Filtering and IP Filtering
- NAT ALGs (Application Layer Gateway)
- Blocks SYN/ICMP Flooding

VPN Features

- IPSec/Remote Server (Net-to-Net, Host-to-Net), GRE, PPTP Server, L2TP Server, SSL Server/Client (Open VPN)
- Max. Connection Tunnel Entries: 60 VPN tunnels,
- Encryption methods: DES, 3DES, AES, AES-128/192/256
- Authentication methods: MD5, SHA-1, SHA-256, SHA-384, SHA-512

Networking

- Outbound load balancing
- Failover for dual-WAN
- High Availability
- Captive Portal
- RADIUS Server/Client
- Static IP/PPPoE/DHCP client for WAN
- DHCP server/NTP client for LAN
- Protocols: TCP/IP, UDP, ARP, IPv4, IPv6
- Port forwarding, QoS, DMZ, IGMP, UPnP, SNMPv1,v2c, v3
- MAC address clone
- DDNS: PLANET DDNS, Easy DDNS, DynDNS and No-IP

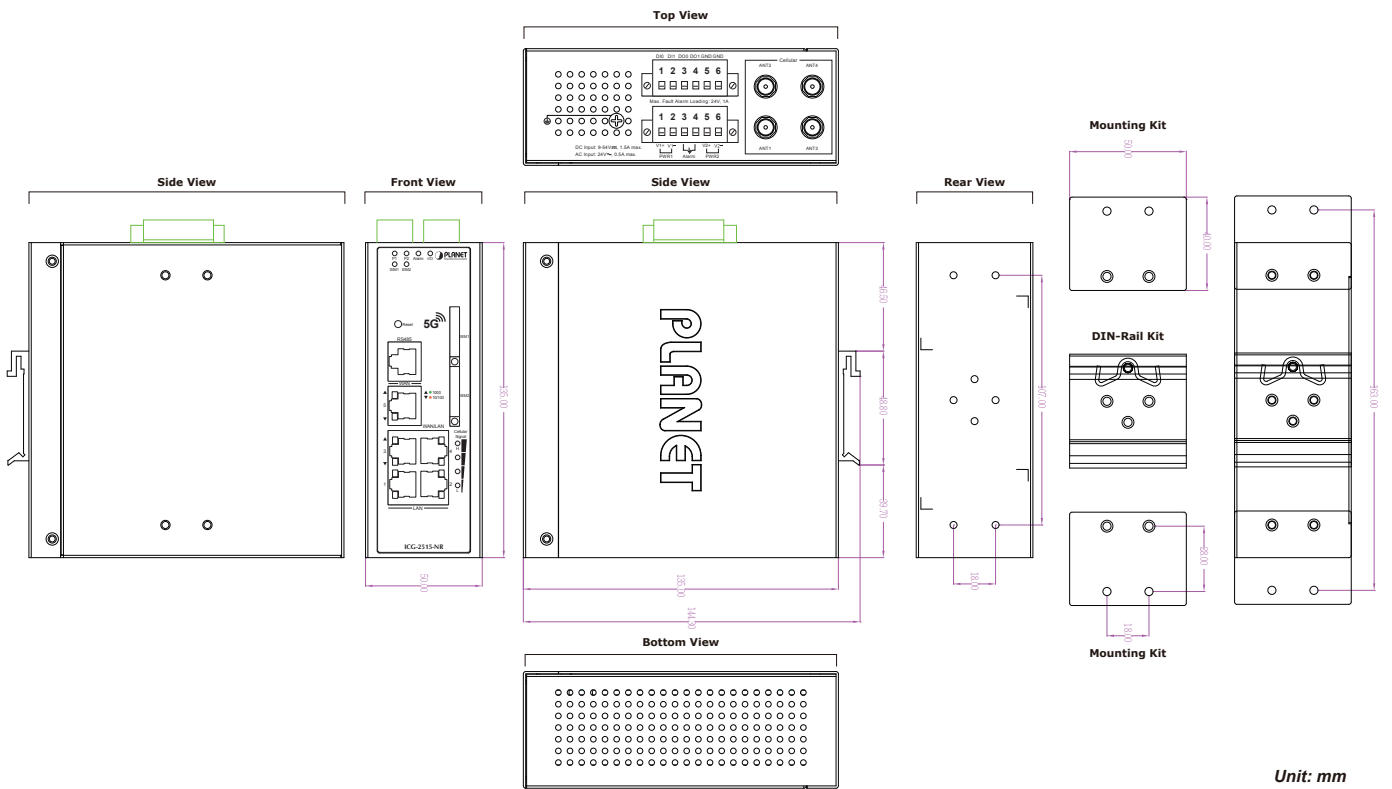
Others

- Setup wizard
- Dashboard for real-time system overview
- Supported access by HTTP or HTTPS
- Auto reboot
- PLANET NMS System and Smart Discovery Utility for deployment management
- Planet CloudViewer App for real-time monitoring

Product	ICG-2515-NR
Hardware Specifications	
Copper Ports	5 10/100/1000BASE-T RJ45 Ethernet ports including 3 LAN ports (Ports 1 to 3) 1 LAN/WAN port (Port 4) 1 WAN port (Port 5)
Serial Interface	RJ45 serial port
SIM Interface	2 SIM card slots with mini SIM card tray
Cellular Antenna	5 dBi external antennas with SMA connectors for 5G-NR
DI & DO Interfaces	2 Digital Input (DI): Level 0: -24V~2.1V ($\pm 0.1V$) Level 1: 2.1V~24V ($\pm 0.1V$) Input Load to 24V DC, 10mA max. 2 Digital Output (DO): Open collector to 24V DC, 100mA max.
Connector	Removable 6-pin terminal block for power input Pin 1/2 for Power 1, Pin 3/4 for fault alarm, Pin 5/6 for Power 2
Reset Button	< 5 sec: System reboot > 5 sec: Factory default
Enclosure	IP30 metal case
Installation	DIN rail, desktop, wall-mounting
LED Indicators	System: P1 (Green) P2 (Green) Alarm (Red) I/O (Red) Ethernet Interfaces (Port1-4 and WAN Port): 1000 LNK/ACT (Green) 10/100 LNK/ACT (Amber) Cellular SIM: SIM1 and SIM2 (Green) Cellular signal: 4 levels (Green)
Dimensions (W x D x H)	50 x 135 x 135 mm
Weight	0.8 kg
Power Requirements – DC	9~54V DC, 0.5A
Power Consumption	7 W / 23.9 BTU
Multi Band Supports	
5G NR	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/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B46/B66/B71
LTE TDD	B34/B38/B39/B40/B41/B42/B43/B48
WCDMA	B1/B2/B3/B4/B5/B8
GNSS	GPS L1+L5 dual bands/GLONASS/BeiDou/Galileo/QZSS
Data Transmission Throughput	2.4Gbps (DL)/500Mbps (UL) for NR 1Gbps (DL)/200Mbps (UL) for LTE 42Mbps (DL)/5.76Mbps (UL) for HSPA+
Advanced Functions	
VPN	<ul style="list-style-type: none"> ■ IPSec/Remote Server (Net-to-Net, Host-to-Net) ■ GRE ■ PPTP Server ■ L2TP Server ■ SSL Server/Client (Open VPN)
VPN Tunnels	Max. 60
VPN Throughput	Max. 60Mbps
Encryption Methods	DES, 3DES, AES or AES-128/192/256 encrypting
Authentication Methods	MD5/SHA-1/SHA-256/SHA-384/SHA-512 authentication algorithm
Management	
Basic Management Interfaces	Web browser SNMP v1, v2c PLANET Smart Discovery utility/UNI-NMS supported
Secure Management Interfaces	SSHv2, TLSv1.2, SNMP v3
System Log	System Event Log

Others	Setup wizard Dashboard System status/service Statistics Connection status Auto reboot Diagnostics
Standards Conformance	
Regulatory Compliance	CE, FCC
Environment	
Operating	Temperature: -40 ~ 75 degrees C Relative humidity: 5 ~ 90% (non-condensing)
Storage	Temperature: -40 ~ 85 degrees C Relative humidity: 5 ~ 90% (non-condensing)

Dimensions



Ordering Information

ICG-2515-NR Art. n° 166058 Industrial 5G NR Cellular Gateway with 5-Port 10/100/1000T