

IOG880-0G1B1

5G/4G IIoT Gateway

As 5G technology growing up, the next generation cellular 5G makes new features of the network with higher bandwidth and lower latency. IOG880-0G1B1 is an advanced IIoT gateway for 5G network. It has high performance with gigabit level via 5G and fixed ether-net. The IOG880 is optimized to acquire, process and filter large amount of real-time data. It creates secure IIoT system and enables cloud integration providing full operational control over field devices from any place in the world. The cost-effective industrial network solution is easy to scale connecting wide range of assets as systems, logic controllers, actuators, and sensors.



Applications:

- IIoT/AIoT and networking
- System cloud integration
- Smart City and ITS
- Remote monitoring
- IT Machine

IOG880-0G1B1

1* 5G NR (Dual SIM)	1* WiFi 2.4GHz 1* WiFi 5GHz Concurrent
1* GE WAN (configurable)	3(2)*GE LAN
1*Micro-SD	1*RS232/485
Power Input DC 9-36V	2*AI+2*DI+2*DO
	1*USB 2.0

-0G1B1: 5G NR

High-Speed Network



- 5G-NR Network
- Giga-Ethernet

Industrial IoT & cloud integration



- HTTP, MQTT, OPC-UA, Data Logging
- Modbus TCP/RTU/ASCII

Robust low-latency networking

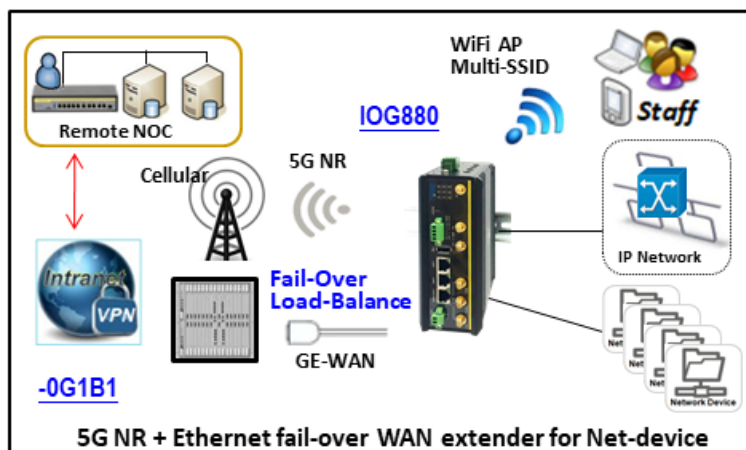
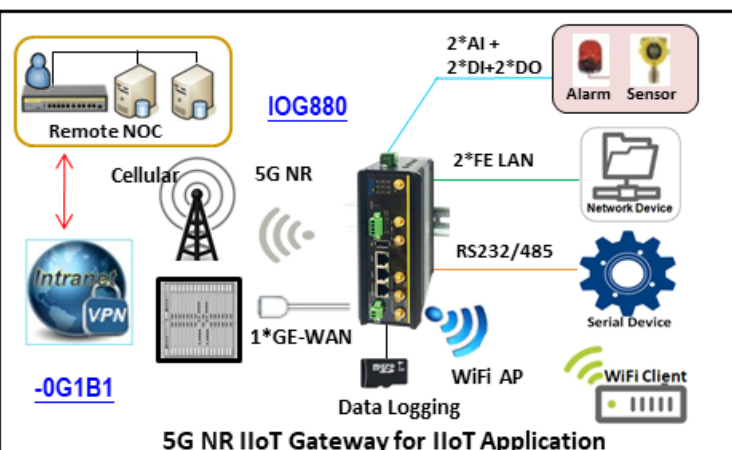


- Multi-WAN Failover / Load Balance
- 5G-NR, WiFi 2.4/5GHz Dual Band

Data & access security



- VPN, Firewall; TR-069, SNMP Remote
- VLAN grouping, I/O ports disablement



Specification Summary

Device Interface

- **4G Module:** 1*5G-NR/4G, 2*micro-SIM (3FF)
- **Ethernet:** 3*RJ45 GE Ports
- **WiFi:** 1*2x2 2.4GHz 802.11 b/g/n , 1*2x2 5GHz 802.11ac
- **Field Bus:** 1*RS-232/485 (Terminal Block)
- **Log Storage:** 1*USB 2.0, 1*Micro-SD
- **I/O:** 2*AI (0~10V, 12bit ADC, sampling rate upto 125KHz),
2*DI (Isolated, "Logic 0": 0~2V, "Logic 1": 5V~30V),
2*DO (Isolated, Non-Relayed Output, 24V/300mA for each port)
- **Power Input :** 1* DC 9V ~ 36V (Terminal Block)
- **Antenna Con.:** 4*SMA (F)-5G/4G, 2*SMA (M)-WiFi

WAN & Uplink

- **WAN:** Cellular & Config. Ether-WAN; Failover, Load Balance
- **Cellular:** 5G/4G, IP Pass-through, IPv4/6
- **Ether-WAN:** Dynamic IP, Static IP, PPPoE , PPTP, L2TP
- **Network Monitor:** ICMP/DNS Query

WiFi

- **Standard:** 802.11 Industry Compliance
- **Mode:** AP Router, WDS Only, WDS Hybrid Modes
- **Functions:** Multi-SSID, WMM
- **Security:** WEP, WPA, WPA2, WPA3, WPA-PSK, WPA2-PSK, 802.1x

Protocol

- **LAN & VLAN:** DHCP Server/Relay, Port/Tag based VLAN
- **IPv6:** Dual Stack, Static IPv6, DHCPv6, PPPoEv6
- **Port Forward:** NAT 1-1, 1-many, transversal, DMZ, Virtual Server & Computer, VPN Pass-through
- **Routing:** Static, Dynamic - RIP1/RIP2, OSPF, BGP
- **QoS:** Policy-based, 802.1q and TOS for priority queues

Field Comm.

- **Virtual COM:** RFC2217, TCP Client, TCP Server, UDP
- **Modbus:** Gateway for Modbus TCP/RTU/ASCII Master/Slave Access;
Slave for Device Status/Information Access
- **Data Interchange:** OPC UA Server, MQTT Broker, MQTT Client
- **Data Logging:** Sniffer, Off-line, Full-time Proxy, mixed modes

Security

- **VPN Tunneling:** IPSec, OpenVPN, PPTP, L2TP, GRE
- **Scenario:** Site/Host to Site/host; Hub and Spoke; Dynamic VPN
- **VPN Capability:** IPSec: up to 8 tunnels
- **Firewall:** SPI Firewall with Stealth Mode, IPS
- **Access Control:** Packet Filter, URL Blocking, MAC Filter

Administration

- **Configuration:** Web UI, CLI, Command Script
- **Management:** SNMPv3 Std. & AMIT MIB, TR069
- **System:** Upgrade, Backup & Restore, Reboot & Reset, SysLog
- **Diagnostic:** Packet Analyzer, Diagnostic Tools

Service

- **Cellular Toolkit:** Data Usage, SMS, SIM PIN, Network Scan

Environment

- **OP/Storage Temp.:** -30°C ~ 60°C ; -40°C ~ 85°C
- **Humidity:** 10%~95% (non-condensing)
- **Enclosure:** Metal Body with Aluminum Extrusion Covers,
DIN-Rail, Bracket (Optional)
- **Dimension:** 62x125x160mm (w/o mounting kit)
62x135x160mm (with DIN Rail kit)

Certificate - CE

- Standards & Regulation
- EMI: EN 55032: 2015 +AC: 2016 Class B, EN61000-3/-6
- EMS: EN 55024, IEC 61000-4, IEC 61000-6
- Radio: EN 300 328, EN 301 489, EN 301 839, EN 50385
- Safety: EN 60950, EN 62368-1

Package Accessory

- 1*Device
- 4*Cellular Antenna, 2*WiFi Antenna
- 3*Terminal Block (for DC Power, Serial, I/O)
- 1*RJ45 Cable
- 1*DIN Rail Kit, 1*Screw Bag

SKU Information:

IOG880-0G1B1-00-yy : 5G-NR

'yy': Area Variant. As below table

yy	SKU	Cellular Band	Module Cert.	System Cert.
G0	Global	n1 / n3 / n5 / n7 / n8 / n20 / n28 / n41 / n66 / n71 / n77 / n78 / n79	CE, FCC, RCM, GCF	CE

Comment:

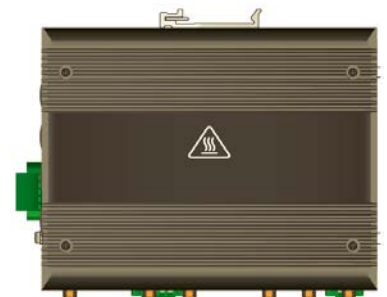
- Specifications are subject to change without prior notice.
- Besides CE, other regional certification needs to be checked for availability.
- Supported cellular & LoRa frequency depends on regional hardware version.

Mechanic Drawing

(1) Left View



(2) Top View



(3) Front View



AMIT Wireless Inc.

TEL: +886 (0)6 505 8026 FAX: +886 (0)6 505 8068

Web: <http://www.amitwireless.com> Email: sales@amit.com.tw

No. 28, Lane 31, Huandong Rd., Sec. 1, Xinshi Dist., Tainan City 74146, Taiwan (R.O.C.)