

Intwine Connect Gateway – ICG 200 Series



The Intwine Connect Gateway 200 (ICG-200) delivers fast connectivity via cellular LTE serving many locations as primary internet, and some as its reliable broadband backup. Not only is cellular connectivity in its DNA, so also is edge computing and IoT device servicing. Popular uses include high-speed primary or backup connectivity, connecting equipment and systems in small & mid-sized businesses (SMBs), equipment monitoring and management, and serving up reporting & analytics for connected sensors or devices.

The ICG-200 incorporates prior Intwine router advancements with edge-advancing capabilities. Its foundation remains premier cellular connectivity, and optimizing throughput for connected devices. Built up the cellular foundation is edge-intelligent capable Machine-to-Machine (M2M) communications. The integrated 802.11bgn solution serves as a WiFi access point (AP) or as a client to an existing Wi-Fi infrastructure. The 4G LTE WAN can be configured as the primary WAN or as a backup internet connection.

Integrated with the Intwine Connect device management portal, there's nearly endless use cases for where ICG-200's edge-intelligence advances organizations, including SMBs.

Product Features

- LTE Internet Connectivity, Enterprise-class
- Wi-Fi 802.11bgn 2.4GHz
- Bluetooth and BLE 4.2
- Dual SIM / Dual ethernet ports / Dual USB 2.0 ports
- VPN end-to-end encryption
- Configurable monitoring & notifications
- Smart Hub for IoT devices & sensors



Hardware

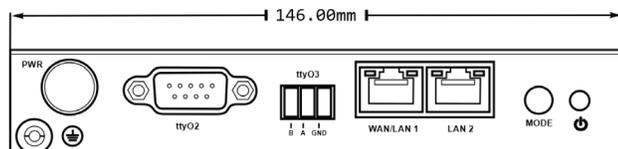
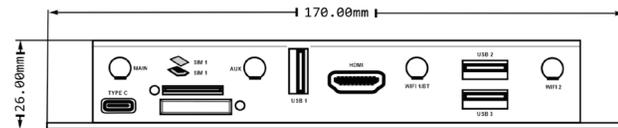
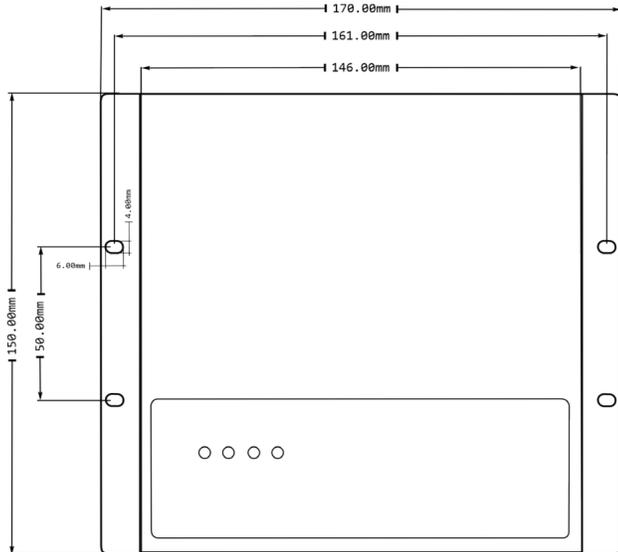
The ICG-200 is designed for plug and play simplicity across industries, network types, and carrier types. Equipped with LTE, dual SIM, dual ethernet, USB 2.0 ports, and a Cat.6 cellular radio, this device is especially suited for critical business infrastructure. Standard configuration includes:

- 1.8 GHz 6-core ARM processor / 128MB DDR2 RAM
- Dual-SIM for multi-carrier fallback / Dual ethernet ports
- Embedded 4G LTE Cat.6 cellular radio
- Integrated MIMO 802.11bgn 2.4GHz, and BLE 4.2 Bluetooth Low Energy radio
- Locally hosted, configurable LAN and WAN interfaces
- Supports all North American cellular carriers, with capability available for Europe, the Middle East, Africa, Asia-Pacific, and India

Software

The ICG 200 delivers a reliable, flexible platform readily customized for application-specific requirements. The default Intwine EdgeBUS® software stack includes: configurable firewall, port forwarding, dynamic/redundant WAN configuration, as well as software agents for rapid deployment of IoT and edge computing applications. Standard interfaces include: MQTT, OPC-UA, BACnet, Modbus, and more. Configurations available for notifications, logging, and monitoring. The ICG-200 edge computing can send results to Intwine's CloudBUS® system or nearly any IoT cloud service.

Dimensional Drawings



Specifications

Platform	
OS	Debian "Stretch" 9
Processor	ARM Dual-Core Cortex A-72 @1.8GHz ARM Quad-Core Cortex A-53 @1.8GHz
Flash Memory	16GB eMMC (128GB available)
DRAM Memory	2GB DDR3
Interfaces	
Ethernet	10/100/1000Mbps (2 ports)
USB	2.0 Type- A (3 ports)
SIM	Standard/Mini/2FF (2 SIM Slots)
Serial	RS485
BLE	Bluetooth Classic and BLE 4.2
Power	
Source	12 VDC
Consumption	< 5 Watts – Typical, < 15 Watts - Peak
Mechanical	
Dimensions	170 x 150 x 26mm
Enclosure	Metal, IP40, fanless
Temperature & Humidity	-0 to +70°C Operating -40 to +85°C Storage 5-95% humidity (non-condensing)
Certifications	FCC Part 15B and C, UL 60950, IC, CE, Verizon 4G LTE, PTCRB, AT&T 4G LTE and 3G
Cellular Radio: Gemalto PLAS9-X CAT 6	
Penta Band LTE	700/700/850/AWS (1700/2100)/1900 MHz; FDD-Band (B2/B4/B5/B7/B12/B13/B25/B26/B293/B30/B66)
Carrier Aggregation	2xCA Supported
Tri Band UMTS (WCDMA)	850/AWS (1700/2100)/1900 MHz; FDD-Band (B2/B4/B5)
Quad Band GSM/GPRS/EDGE	GSM/GPRS/EDGE 850/900/1800/1900 MHz