Intwine Connected Gateway - ICG-150

Product Features

- **Compact Industrial VPN Router**
- **Dual SIM**
- **IP30 Protection Rating**
- **Cat4 or CatM1/NBIoT Cellular**
- **CE, FCC, PTCRB, IC, Verizon, AT&T**
- **Operating Temperature (-20 to +70℃)**

The Intwine Connected Gateway (ICG-150) is a single purpose industrial networking device with routing and basic connectivity that provides lower-level, physical layer gateway functionality.

The integrated 802.11bgn solution allows the gateway to serve as a Wi-Fi access point (AP) or as a client to an existing Wi-Fi infrastructure, and the 4G LTE WAN can be configured as the primary WAN or as a network backup to an existing infrastructure. A fleet of deployed ICGs can be controlled and monitored using the Intwine Remote Management Portal, with the ability to monitor, control, and automate heterogeneous networks.

Standard Hardware

The ICG-150 is an EMC level 2 router with standard over-current protection and plug and play simplicity for connecting local devices to the Internet and/or an intranet, and many applications across multiple industries. Equipped with LTE failover, dual SIM, and an IP30 protection rating, this device is especially suited for industrial use in harsh environments and unattended locations for critical applications.

Standard configuration includes:

- 580MHz Processor
- 128MB DDR2 RAM
- Dual-SIM for multi-carrier fallback
- Two 10/100 Ethernet ports with 1.5KV network isolation transformer protection
- Embedded 4G LTE Cat.4 cellular radio
- Integrated MIMO Wi-Fi 802.11bgn 2.4GHz
- A locally hosted configuration page for customization of 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-150 standard software consists of a complete IP networking stack including QoS Management, VRRP hot backup, port mapping, configurable firewall, with end-to-end security supporting PPTP, L2TP, GRE, IPSEC VPN (IKEv1, IKEv2), OpenVPN protocols, and CA digital certificates.
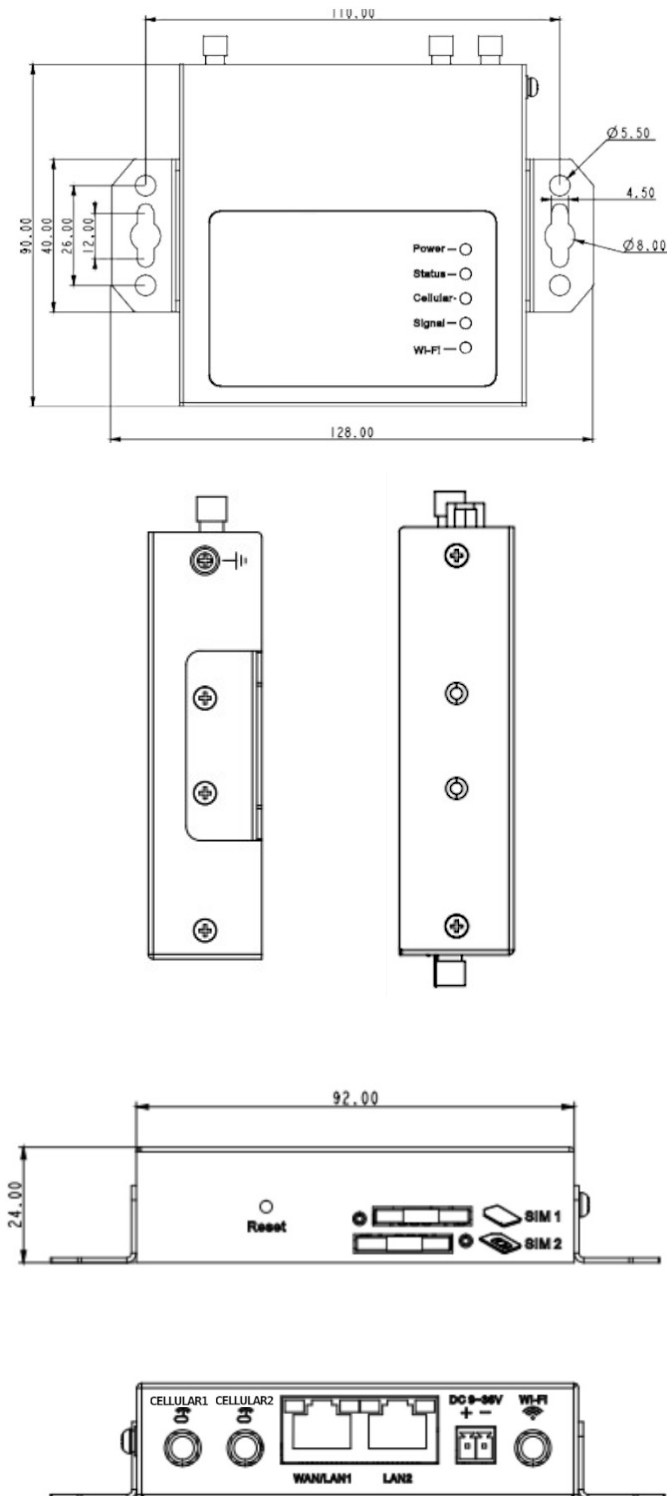
Antenna

Supports APN, VPDN, PrivateNetwork access for GSM/GPRS/EDGE, UMTS/HSPA+/EVDO/TD-SCDMA, TDD LTE/FDD LTE network types.

Cellular Radio: Quectel EC25-AF CAT 4	
Penta Band LTE	700/700/850/AWS (1700/2100)/1900 MHz; FDD-Band (B2/B4/B5/B12/B13/B14/B25/B66/B71)
Tri Band UMTS (WCDMA)	850/AWS (1700/2100)/1900 MHz; FDD-Band (B2/B4/B5)
Quad Band GSM/GPRS/EDGE	850/900/1800/1900 MHz

Dimensional Drawings

Specifications

Platform	
Processor	580MHz
Flash Memory	32MB SPI
DRAM Memory	128MB DDR2
Interfaces	
Ethernet	10/100 Mbps (2 ports)
Nano SIM	4FF (2 Slots)
Cellular	Cat4 or CatM1/NBIoT
Wi-Fi	IEEE 802.1 1b/g/n 150Mbps
Power	
Source	DC9-36V 2 PIN industrial terminal block
Consumption	< 0.2 Watts – Typical, < 0.25 Watts - Peak
Mechanical	
Dimensions	90 x 90 x 25mm
Enclosure	Metal, IP30, fanless
Temperature & Humidity	-20 to +70°C Operating -40 to +85°C Storage 5-95% humidity (non-condensing)
Physical	
Shockproof	IEC60068-2-27
Vibration Resistance	IEC60068-2-6
Free Fall	IEC60068-2-32
EMC	
Power Frequency Magnetic Field Resistance	EN61000-4-8, horizontal vertical 400A/m (>level 2)
Radiation Electric Field	EN61000-4-3, level 2
Pulsed Electric Field	EN61000-4-4,level 2
Conducted Disturbance Immunity	EN61000-4-6, level 2
Shock Wave Resistance	EN61000-4-12, level 2
Static	EN61000-4-2, level2
Surge	EN61000-4-5,level 2
Certifications	
	CE, FCC, PTCRB, IC, Verizon, AT&T