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°C)

The Intwine Connected Gateway (ICG) 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 WiFi 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 overcurrent 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.6 cellular radio
- Integrated MIMO 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.

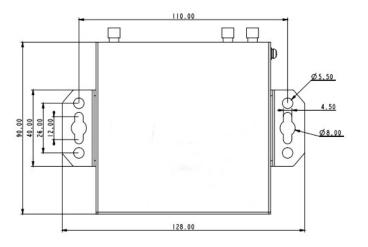
Antenna

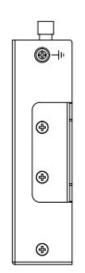
Supports APN, VPDN, PrivateNetwork access for GSM/GPRS/EDGE, UMTS/HSPA+/EVDO/TD-SCDMA, TDD LTE/FDD LTE network types.

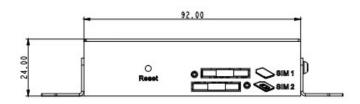
Cellular Radio: Gemalto PLAS9-X CAT 6	
Penta Band LTE	700/700/850/AWS (1700/2100)/1900 MHz; FDD-Band (13,17,5,4,2)
Tri Band UMTS (WCDMA)	850/AWS (1700/2100)/1900 MHz; FDD- Band (5,4,2)
Quad Band GSM/GPRS/EDGE	850/900/1800/1900 MHz

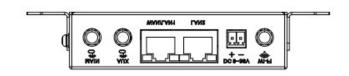


Dimensional Drawings









Specifications •

	Platform
Processor	580MHz
Flash Memory	32MB SPI
DRAM Memory	128MB DDR2
	Interfaces
Ethernet	10/100 Mbps (2 ports)
SIM	2FF (2 SIM Slots)
WiFi	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
Shockproof Vibration Resistance	IEC60068-2-27 IEC60068-2-6
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Vibration Resistance	IEC60068-2-6
Vibration Resistance	IEC60068-2-6 IEC60068-2-32
Vibration Resistance Free Fall Power Frequency Magnetic Field	IEC60068-2-6 IEC60068-2-32 EMC EN61000-4-8,
Vibration Resistance Free Fall Power Frequency Magnetic Field Resistance Radiation Electric	IEC60068-2-6 IEC60068-2-32 EMC EN61000-4-8, horizontal vertical 400A/m (>level 2)
Vibration Resistance Free Fall Power Frequency Magnetic Field Resistance Radiation Electric Field	IEC60068-2-6 IEC60068-2-32 EMC EN61000-4-8, horizontal vertical 400A/m (>level 2) EN61000-4-3, level 2
Vibration Resistance Free Fall Power Frequency Magnetic Field Resistance Radiation Electric Field Pulsed Electric Field Conducted Disturbance	IEC60068-2-6 IEC60068-2-32 EMC EN61000-4-8, horizontal vertical 400A/m (>level 2) EN61000-4-3, level 2 EN61000-4-4,level 2
Vibration Resistance Free Fall Power Frequency Magnetic Field Resistance Radiation Electric Field Pulsed Electric Field Conducted Disturbance Immunity Shock Wave	IEC60068-2-6 IEC60068-2-32 EMC EN61000-4-8, horizontal vertical 400A/m (>level 2) EN61000-4-3, level 2 EN61000-4-6, level 2
Vibration Resistance Free Fall Power Frequency Magnetic Field Resistance Radiation Electric Field Pulsed Electric Field Conducted Disturbance Immunity Shock Wave Resistance	IEC60068-2-6 IEC60068-2-32 EMC EN61000-4-8, horizontal vertical 400A/m (>level 2) EN61000-4-3, level 2 EN61000-4-6, level 2 EN61000-4-12, level 2
Vibration Resistance Free Fall Power Frequency Magnetic Field Resistance Radiation Electric Field Pulsed Electric Field Conducted Disturbance Immunity Shock Wave Resistance Static	IEC60068-2-6 IEC60068-2-32 EMC EN61000-4-8, horizontal vertical 400A/m (>level 2) EN61000-4-3, level 2 EN61000-4-6, level 2 EN61000-4-12, level 2 EN61000-4-2, level 2