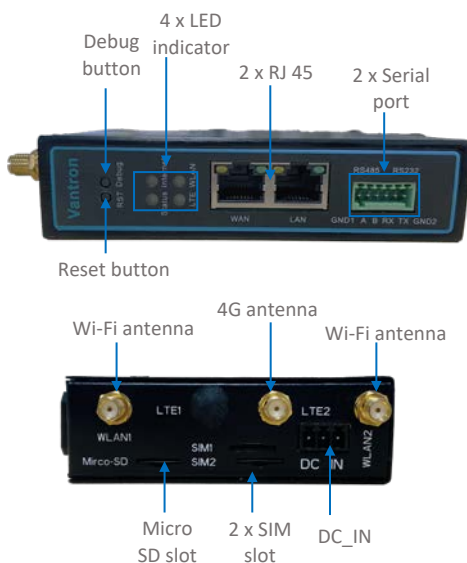# G202 Edge Computing Gateway

Product Brief Introduction

Vantron G202 industrial edge computing gateway is an entry-level edge computing gateway launched to meet the needs of IIoT applications in various industrial scenarios. It combines dual SIMs, Wi-Fi, Ethernet, multiple programming languages, and virtual private network to meet diversified networking requirements. With varying industrial protocols supported, it could interact with PLCs, sensors and other IoT devices on site. G202 applies a communication tactic that uses multiple channels with failover protocol, which together with the high-reliability watchdog maintains a secure and stable network access. As is compact in size, G202 supports panel mount, DIN rail mount, and wall mount to meet the requirements of varying sites. Meanwhile it provides access to Vantron BlueSphere cloud platform for unified management to ease the efforts of users by real-time monitoring and tracking, OTA updates, remote maintenance, task assignment and follow-up.

Featuring high stability and reliability, excellent cost performance, and broad protocol accessibility, G202 industrial edge computing gateway is especially suitable for large-scale data acquisition and cloud platform communication in the following scenarios:

Intelligent manufacturing: injection molding machine, numerical control machine

Intelligent water conservation: water treatment

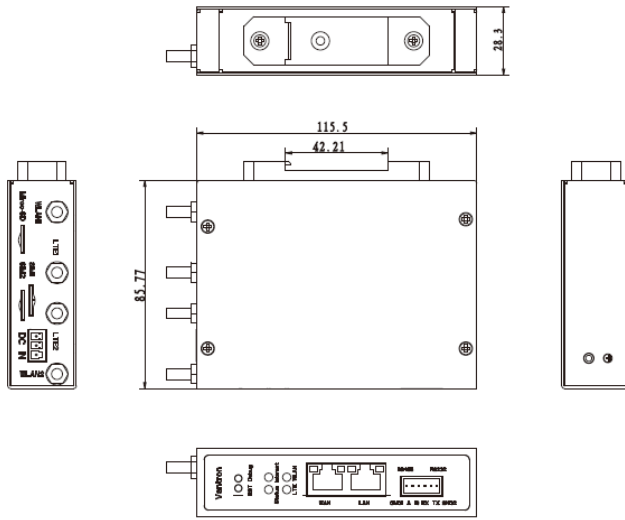Intelligent security & intelligent transportation

Exterior and Features

G202	
	Low power consumption, excellent cost performance
	Sufficient industrial interfaces
	Wired and wireless network accesses
	Multiple industrial protocols supported for communication with field PLCs, etc.
	MQTT protocol supported to connect to varied IoT platforms
	Local edge computing supported
	C/C++/Python supported
	Complete industrial design
	Compact size and flexible installation for varying sites

G202 Edge Computing Gateway Datasheet

G202			
System	CPU	MIPS24KEc, 580MHz	
	Memory	128MB DDR2	
	Storage	32MB Flash	1 x Micro SD card, up to 64GB
Communication	Ethernet	2 x RJ45, 10/100Mbps	
	4G LTE	Optional: CAT M/CAT 4	
	Wi-Fi	2.4GHz, 802.11 b/g/n, 300Mbps, AP & Client	
I/Os	Serial port	1 x RS485 1 x RS485/RS232 (hardware determined)	
	SIM slot	2 x Drawer-type SIM slot	
	Grounding	Enclosure & PCB	
System Control	Button	1 x Reset button	1 x Debug button
	LED indicator	1 x Status indicator	1 x 4G LTE indicator
		1 x Internet indicator	1 x WLAN indicator
Mechanical	Dimensions	115.5mm x 85.77mm x 28.3mm	
	Enclosure	Metal	
	Installation	DIN rail mounting	
	IP rating	IP30	
	Heat dissipation	Fanless	
Power	Input	9-36V DC, Over-current protection, Reverse polarity protection	
	Terminal	3-pin 3.81mm power terminal	
Software	OS	VantronOS	
	Ethernet port protocol	PPP, PPPoE, DHCP, ARP	
	Custom development	SDK available, C/C++/Python supported	
	Device management platform	Vantron BlueSphere GWM	
	Northbound protocol	MQTT	
	Edge computing script	JavaScript, MicroPython	
	Southbound protocol	Modbus TCP, Modbus RTU, EtherNet/IP, ISO-on-TCP, CC-link, etc.	
	IPK import	Supported	
	Log	Supported	
	Configuration mode	Local, remote	
	Upgrade	Local, OTA update	
Network	NAT	Supported	
	Network management	SNMP v1/v2c/v3	
	NTP	Supported	
	IP application	Ping, Traceroute, Nslookup	
	Routing	Static routing	
Security & Reliability	Firewall	Supported	
	VPN	OpenVPN, L2TP, PPTP, IPSec	
	Link detection	Heartbeat detection, automatic reconnection	
	Network reliability	Failover supported, link backup between Ethernet, Wi-Fi and 4G/LTE	
	Multi-level permission	Supported	
Environment Condition	Temperature	Operating: -20℃ ~ +60℃	Storage: -40℃~+70℃
	Humidity	5%-95% RH (Non-condensing)	
Certification	Compliance	FCC, PTCRB	

Product Outlines

Ordering Information

Ordering No.	4G LTE	4G LTE antenna	Wi-Fi antenna	DIN rail mount	Wall mount
G202	-	-	Yes	Yes	Yes
G202-FMNA	CAT M	Yes	Yes	Yes	Yes
G202-F4NA	CAT 4	Yes	Yes	Yes	Yes

Packing list	
G202 Edge computing gateway	1
Wi-Fi antenna	2
Serial port connector (Female)	1
DC power connector	1
4G antenna (rubber) for the cellular version	2

Optional accessories	
12V DC Power adapter	1
Power cord	1
4G antenna (magnetic)	2

Since 2002 established by two Silicon Valley entrepreneurs, Vantron Technology has been a pioneer in connected IoT devices and IoT platform solutions. Today, Vantron is serving customers all over the world, including many Global Fortune 500 companies. The product lines cover intelligent edge hardware, IoT communication devices, industrial displays and the cloud-based BlueSphere device management platform.

Vantron offers IoT communication devices that enable multi-protocol connections for industrial equipment and local data processing through edge computing. With abundant wired and wireless connectivity options, remote operations and maintenance have become easier than ever. Such devices can be deployed across different sectors such as smart retail, medical and warehousing. Moreover, Vantron's IoT solutions are designed to facilitate enterprises' digital transformation, streamline operations, enhance productivity, etc.