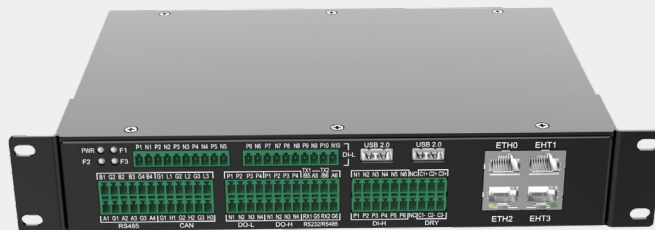


EG604 Multi-I/O

Edge Computing Gateway



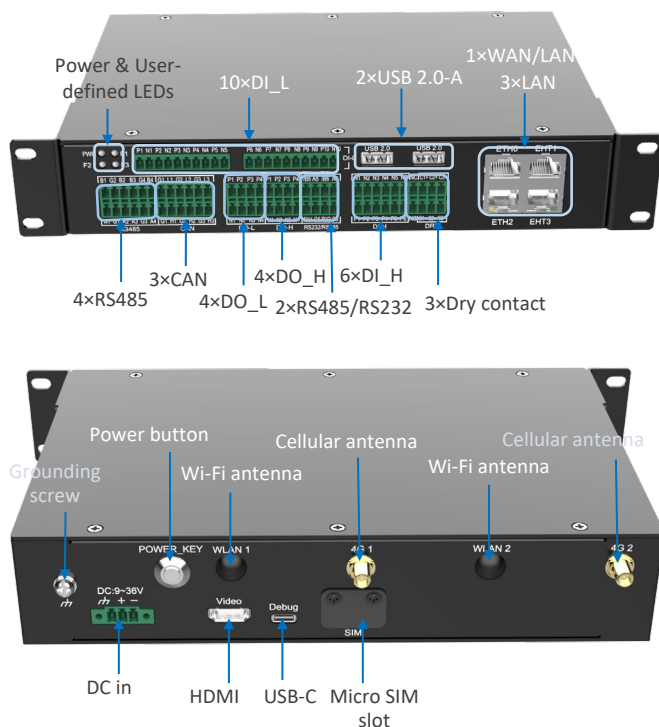
Product Overview

Vantron EG604 is a robust edge gateway powered by a high-efficiency quad-core industrial processor, paired with 4GB memory and 64GB onboard storage to deliver steady local edge data computing performance for factory automation, smart retail, medical interactive display terminals, outdoor IoT monitoring and on-site intelligent device interconnection.

Multiple communication options are available for flexible data upload and inter-device linkage. Four GbE ports serve wired WAN/LAN communication, while built-in cellular module realizes wireless wide-area transmission. Optional Wi-Fi and Bluetooth further enrich short-range wireless connection scenarios, meeting diversified industrial IoT transmission demands.

The gateway integrates full-range signal acquisition and expansion interfaces: multiple DI/DO channels, dry contact relay terminals, RS-485/232 and CAN industrial serial buses to access various industrial field devices. It also reserves USB 2.0 expansion slots, HDMI display output and debug interfaces, supporting peripheral extension, local screen preview and equipment troubleshooting.

Layout and Features

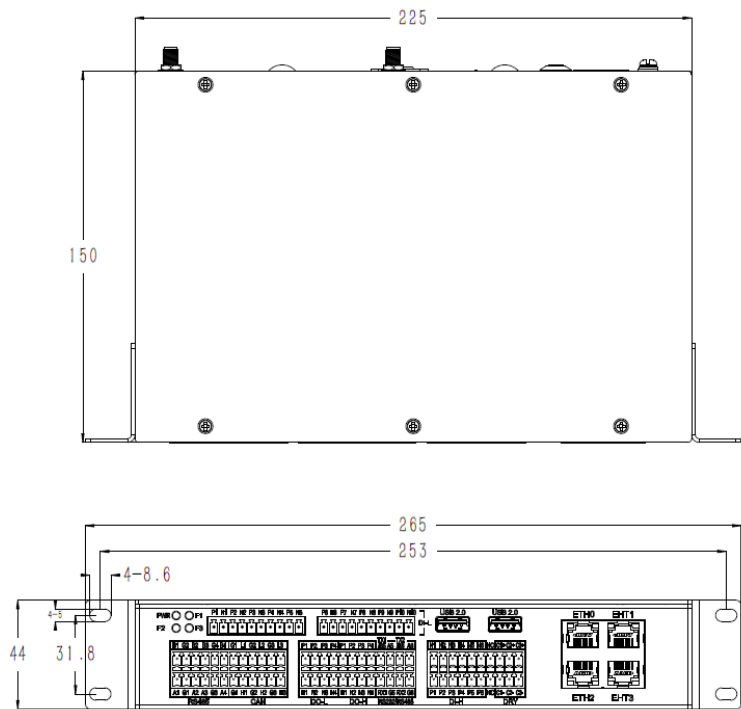


- ❖ Quad-core ARM Cortex-A55 CPU, up to 2.0GHz
- ❖ Onboard 4GB memory and 64GB storage
- ❖ Gigabit ETH, cellular, optional Wi-Fi & Bluetooth
- ❖ Rich industrial I/O: USB, RS-485/232, CAN, DI/DO
- ❖ 1080p HDMI output for local on-site display
- ❖ Optional BlueSphere GWM support for remote control
- ❖ Industrial extended temperature range (-20°C to 70°C)
- ❖ Wide 9–36V DC input voltage
- ❖ USB-C debug port for device troubleshooting & upgrade

Specifications

EG604			
System	CPU	Quad-core ARM Cortex-A55 processor, 2.0GHz (Max.)	
	NPU	1 TOPS	
	Memory	4GB DDR4	
	Storage	64GB eMMC	
Communication	Ethernet	4 × RJ45, 10/100/1000Mbps (1 × WAN/LAN, 3 × LAN)	
	4G LTE	CAT 4	
	Wi-Fi & Bluetooth	Optional	
I/O	Display	1 × HDMI 2.0, up to 1080p@120Hz / 4096x2304@60Hz	
	Serial Port	4 × RS485, isolated	2 × RS232/RS485 (Software switchable)
	USB	2 × USB 2.0 Type-A	1 × USB Type-C (Debug)
	CAN	3 × CAN, isolated	
	DI	6 × DI_H (Active, wet contact)	10 × DI_L (Inactive, dry contact)
	DO	4 × DO_H (Max. 4A/100ms)	4 × DO_L (Max. 4A/100ms)
	Dry Contact	3 × Relay-isolated dry contact (Max. 24 V, jumper-selectable NO/NC, default NO)	
	SIM Slot	1 × Micro SIM slot	
	Antenna	2 × Cellular antenna connector (SMA-K)	
		2 × Wi-Fi antenna connector (RP-SMA-K)	
System Control	Button	1 × Power button	
	LED indicator	1 × Power LED	3 × User-defined LED
Mechanical	Dimensions	265 mm × 150 mm × 44 mm (Incl. mounting bracket)	
	Weight	~ 1.5 kg	
	Installation	VESA, DIN rail mount, rack mount	
Power	Input	9-36V DC, over-current protection, reverse polarity protection	
	Terminal	3-pin 3.81mm power terminal	
	Consumption	Max load: 105.3 W (9.3 W + DO_H: 4A × 24V)	
		Idle: 5 W	Shutdown: 0.3 W
Software	OS	Web-based VantronOS (Optional: Debian 11)	
	Configuration	VantronOS, BlueSphere GWM (Optional)	
	Remote Management	BlueSphere GWM (Optional)	
Environmental Condition	Temperature	Operating: -20°C ~ +70°C	Storage: -40°C~+85°C
	Humidity	5%-95% RH (Non-condensing)	
	EMC	EMC Level 4	
Certification	Compliance	FCC, ISSED, CE	
	Carrier Certification	AT & T, Verizon, T-Mobile	

Mechanical Outline



Ordering Information

Ordering No.	Cellular	WLAN	Ethernet	Memory & Storage
EG604	4G LTE	-	1 x WAN, 1 x LAN	4GB + 64GB
EG604-W	4G LTE	Wi-Fi & Bluetooth	1 x WAN, 1 x LAN	4GB + 64GB

Packing List	
EG604 Edge computing gateway	1
Cellular antenna	2
DC power connector	1
I/O mating connector	5

Optional Accessories	
12V DC Power adapter	1
Power cord	1
Wi-Fi antenna	2