

## **Multiple Networks Industrial Edge Computing Gateway**

- Powered by Raspberry Pi Compute Module 4 Cortex-A72 @ 4x1.5GHz
- Global 4G LTE/3G/2G/NB-IoT Cellular network
- 2.4G/5G WiFi, Bluetooth, LoRaWAN,

WiFi HaLow (802.11ah WiFi) Supported

- Dual Gigabit Ethernet ports for configurable WAN / LAN
- Isolated RS485, RS232, DI, AI & DO ports for industrial
- 35mm DIN-Rail and wall mount Supported
- Fanless design with full aluminum heatsink enclosure
- -25°C to +70°C Operating Temperature for harsh environment
- Fully Compatible with Raspbian, OpenWRT, Ubuntu OS, Winows 10 IoT, etc.

The Elastel EG500 is a high-performance IoT Edge computing Gateway with multiple networks supported for industrial applications. Powered by Raspberry Pi CM4 with rugged, fanless design. Up to Quad-core Cortex-A72 1.5GHz CPU, 8GB RAM, 32GB eMMC computing capability, makes EG500 as an edge computing gateway for any kinds applications like AI, IoT Gateway, Edge Computing Device, Automation Controller...







## Industrial Edge Computing Gateway EG500

With 4G LTE/3G/2G/CAT M1(eMTC) and NB-IoT cellular network, Dual-band 2.4GHz/5GHz Wi-Fi, dual Gigabit Ethernet, and reserved LPWAN LoRa, Sub 1GHz WiFi (802.11ah WiFi HaLow) network connectivity, makes EG500 can perform a centralized gateway for most kind of IoT connectivity.

Expanded isolated I/O connectivity options for industry needs, working temperature from -25 ~ 70°C, IP30, wide range power input, DIN Rail installation... all these industrial grade design makes EG500 working in harsh environment rugged and stability.



Powerful and Optimized Linux based OS, allows user configure and develop any kinds of industrial applications freely.



## **Specifications**

Hardware platform					
CPU	Broadcom BCM2711, Quad-core A72 (ARM v8)@ 1.5 GHz				
Memory	2GB (2GB/4GB/8GB optional) LPDDR4				
FLASH	8GB (16GB/32GB optional) eMMC				
Network & Interfaces					
Ethernet	2x Gigabit Ethernet, (1-WAN+1-LAN or 2-LAN Configurable)				
Cellular	4G LTE, 3G, 2G, NB-IoT, CAT-M1				
Wi-Fi	Dual Band 2.4GHz & 5GHz + Bluetooth 5.0				
LoRaWAN	Supported (Optional)				
WiFi HaLow (802.11ah WiFi)	Supported (Optional)				
GPS	Cellular Module built-in supported (Optional)				
SIM	1.8 V/3 V; drawer-type Nano card holder × 1				
	15KV ESD Protection				
Antonna	LTE: inside SMA x 1, WiFi/Buletooth: inside SMA x 1,				
Antenna	LoRa/WiFi Halow: inside SMAx1 (Reserved)				
	RS-232 x 1, RS-485 x 1;				
Industrial Serial Port	RS-232 signal: TXD, RXD, GND; RS-485 signal: A, B, GND; ESD protection:				
	15KV				
	6-channel isolated DI (digital input)				
1/0	(024VDC, Configurable Status/Count mode)				
, , <b>C</b>	3-channel Analog input Al				
	(0-10V DC, 4-20mA, 18-bit resolution)				

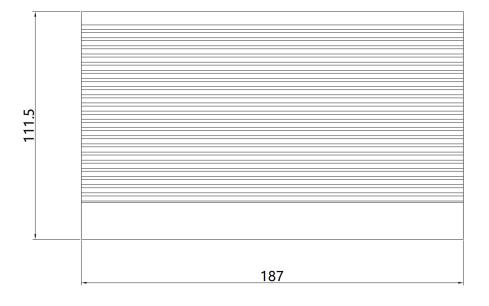


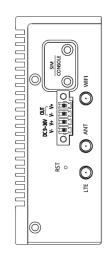
# Industrial Edge Computing Gateway EG500

	6-channel isolated DO (digital/pulse output)			
	(060V, Max. power efficiency: 500 mA)			
USB	USB 2.0 x 2 for peripherals,			
	USB-C x 1 for debug Console			
HDMI	HDMI 2.0 x 1, (Up to 4kp60 video & audio output)			
Reset Button	Supported			
Power	·			
Power supply	Wide Range Voltages 9~36V DC/1A, recommended 24V/1.5A			
Power Terminal	Unpluggable industrial 4-PIN terminal connection			
Power consumption	Less than 10 W (system)			
Power Output	2-channel power supply for slave devices, same value as Power input			
Mechanical features				
Protection	IP30			
Housing	Aluminum Heatsink			
Cooling	Fanless cooling			
Dimensions (cm)	187mm x 112mm x 42mm			
Installation	DIN-rail, wall mounting			
Ambient temperature and humidity				
Storage temperature	-30 ~ 75°C			
Ambient humidity	5 ~ 95% (non-condensing)			
Operating temperature	-25 ~ 70°C (industrial grade)			
EMC index				
Standards	EN55032, EN55035, EN61000-3-2, EN61000-3-3			
Others				
LED Indicator	1-POWER, 1-WiFi, 1-SYSTEM, 1-ALARM,1-ONLINE, 3-Signal Strength			
Watchdog	Standalone Hardware Watchdog			
Warranty	Standard 12 Months			
Software Features				
	Optimized OpenWRT V21 with SDK / Raspbian /Ubuntu /			
OS	Windows 10 IoT/ BalenaOS			
Configuration	WebUI, Local CLI, Remote configuration			
Upgrade operate	Local USB upgrade and remote upgrade (optional)			
Timed startup and shutdown	Supported			
	Data Acquisition, Modbus RTU, VPN, Router, Firewall, Media Player			
Application features	Python, Node-RED, Docker,			
	Support Secondary Development with SDK			
	WWAN and WAN Failover, Load Balance,			
	PPP, PPPoE, SNMP v1/v2c/v3, TCP, UDP,			
Network Features	DHCP, RIPv1/v2, OSPF, BGP, DNS, DDNS,			
Network Features				



## Dimensions





		USB1 USB2	HDMI	V12 V12 V11 V11 V11 V10 V10 8 A 005 003 001 00 005 015 015 017 COM Atz Ati Ale GRD RX TX V. V+ 004 002 006 000 0016 012 016 000		LAN WAN
4		D		O O O   O O O   ONLINE SYS WHFI		

#### About Elastel

Elastel Technology Ltd is a global leading design and manufacturing company providing industrialquality wireless solution for IoT and M2M. Founded in 2018, Elastel leverages its independent research and development and innovation to pursue its core mission: "Easy IoT communication development, Simplify IoT system implementation"

The company's high-quality industrial DTU, Gateway & Computer hardware, and software service enhance the IoT communication efficiency and competitive advantages of its customers all over the world.

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