Arm A35 Cost-efficient IIoT Gateway with built-in 4G LTE
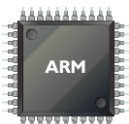
- Arm Dual-core A35 64bit CPU@800MHz, 128MB RAM + 8GB eMMC Hardware platform

- Mini-PCIe slot with driver prebuilt for 4G LTE/3G/2G/NB-IoT cellular modules

- 2x 10/100 Mbps Ethernet ports

- 4x Isolated RS485 and RS232 for Modbus data acquisition

- SD slot available, USB port with driver prebuilt for Wi-Fi dongle

- 35mm DIN-Rail and wall mount Supported

- Fanless design with full heatsink IP30 enclosure

- -40°C to +85°C Operating Temperature for harsh environment

- Linux 5.10 OS with WebUI and SDK for flexible configure and program
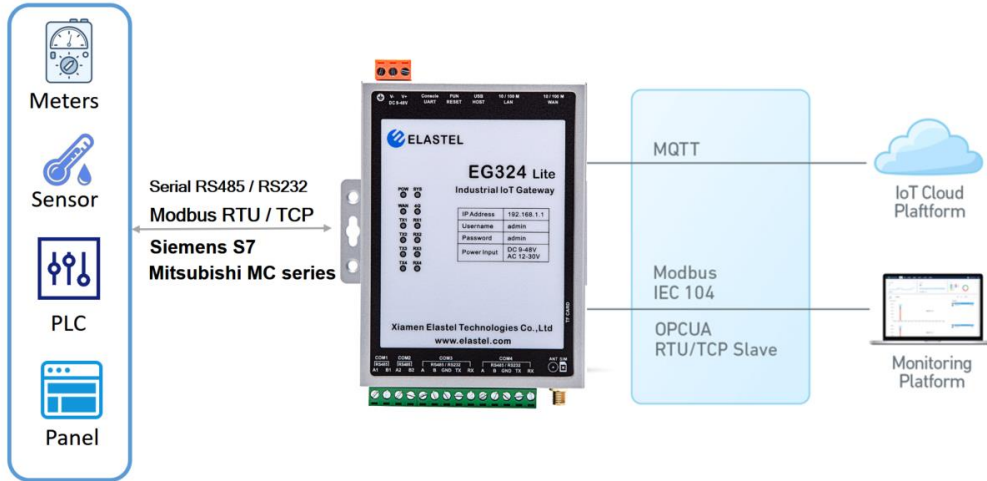
Introduction

The Elastel EG324 Lite IoT Gateway is an ARM based IoT Gateway for remote monitoring, data acquisition and communication applications. Compare with EG324 model, it decreased CPU and RAM capability, which balance the sufficient performance and cut-cost.
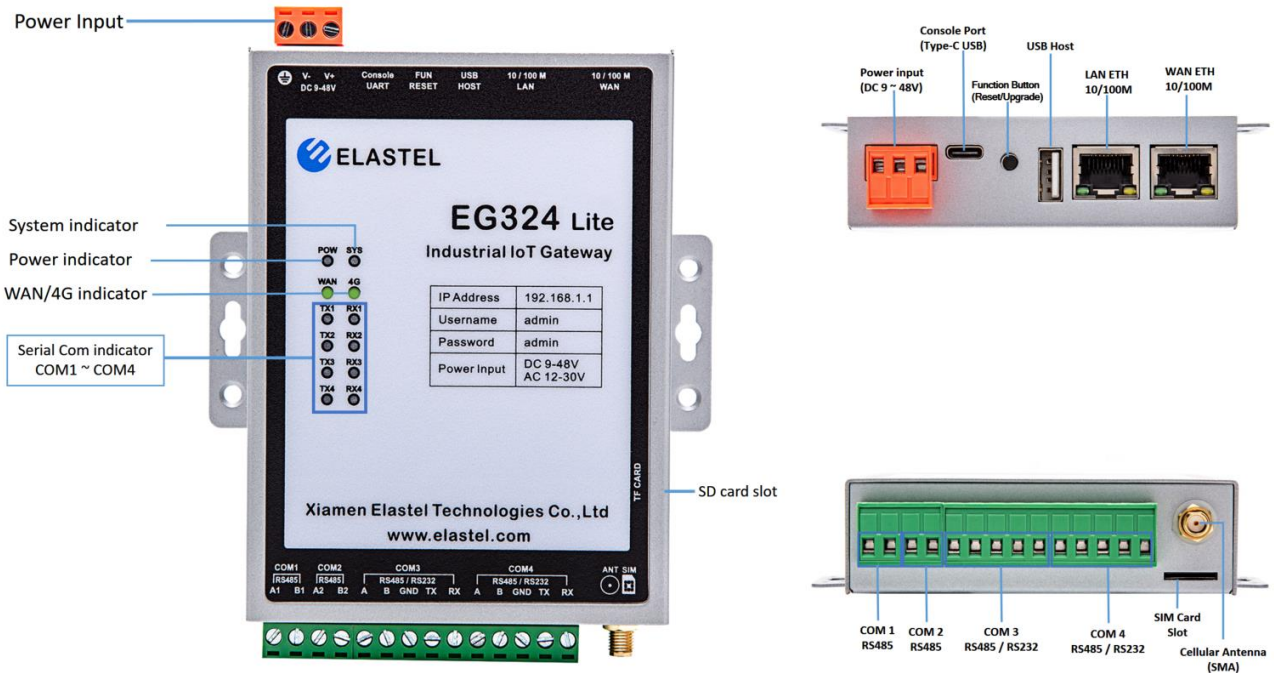
It provides ARM A35 @800MHz, 128MB RAM + 8GB eMMC hardware computing platform, comes with 4 x RS485/232 serial ports, dual 10/100 Mbps Ethernet ports, and a Mini-PCIe socket for 4G LTE/3G/2G/Cat M1/NB-IoT cellular modules. These features let users efficiently adapt the EG324 Lite to a variety of complex Industrial IoT solutions.

Leverage the Open Linux OS, prebuilt common data acquisition drivers like Modbus, MQTT, OPC UA…, and the WebUI easy for configuration and program, EG324 Lite is capable for your edge infrastructure monitoring and data acquisition solutions implementation easy and simple.
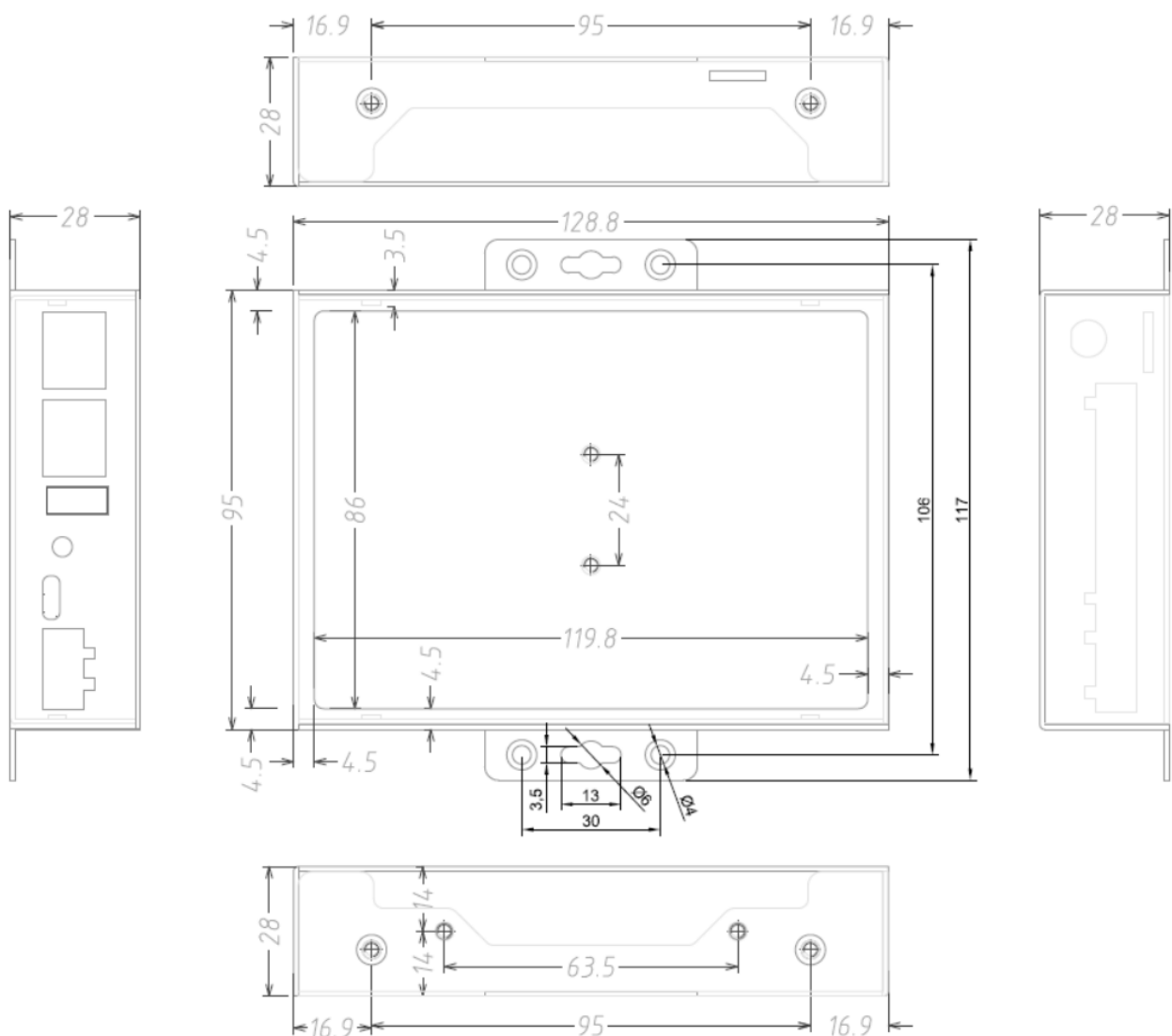

Appearance

Specifications

System	
CPU	Arm Dual-core A35@ 800Hz
Pre-installed OS	Linux 5.10 with WebUI, easy Configurable and Programmable
DRAM	128MB DDR3 (512MB optional)
Storage Pre-installed	8 GB eMMC
Storage Slot	SD slots x 1
Serial Interface	
Serial Ports	2 x RS485 + 2 x RS-232/485 , Full Isolated
Baudrate	300 bps to 921.6 kbps
Data Bits	5, 6, 7, 8
Parity	None, Even, Odd, Space, Mark
Stop Bits	1, 1.5, 2
Protection	Surge 4KV ESD ±15kV IEC61000-4-2 Air Discharge ESD ±15kV Human Body Model
Ethernet Interface	
Ethernet Ports	2 x Auto-sensing 10/100 Mbps ports (RJ45 connector) , 1x WAN, 1xLAN or 2xLAN configurable
Protection	Surge 2KV ESD ±15kV IEC61000-4-2 Air Discharge ESD ±15kV Human Body Model
Cellular Interface	
Cellular module Slots	1 x mPCIe slot for 4G LTE/3G/2G/CAT-M1/NB-IoT Cellular modules
Number of SIMs	1
SIM Format	Micro SIM (12mm*15mm)
Cellular Antenna Connector	SMA
Band Options	**US model:** 4G LTE FDD@ B2/B4/B12/B13; 3G WCDMA@ B2/B4/B5; **EU model:** 4G LTE FDD@ B1/B3/B7/B8/B20/B28A; 4G LTE TDD@ B38/B40/B41; 3G WCDMA@ B1/B8; 2G GSM@ B3/B8; **AU model:** 4G LTE FDD@ B1/B2/B3/B4/B5/B7/B8/B28; 4G LTE TDD@ B40; 3G WCDMA@ B1/B2/B5/B8; 2G GSM@ B2/B3/B5/B8; Other options please contact Elastel representative.

USB Host	
USB 2.0	1 x USB 2.0, type-A connector
Usage	For USB Wi-Fi Dongle with prebuilt drivers; For Storage extend
Power output	5V@500mA
Protection	Output Over Load protection ESD ±8kV IEC61000-4-2 Air Discharge ESD ±6kV Human Body Model
Other Interface	
Console Port	1 x UART type-C connector
Buttons	1x button for Reset and Upgrade
Power Parameters	
Recommended Power	DC 12V/1.5A
Input Voltage	9 ~ 48 VDC, 12 ~ 30 VAC
Power Consumption	Working Mode: 6 W Max Consumption: <10 W
Protection	Overvoltage & Reverse polarity protection Surge 4KV ESD ±15kV IEC61000-4-2 Air Discharge ESD ±15kV Human Body Model
Indicators	
LED Indicators	Power x 1, System (programmable) x1, Cellular WAN x1, WAN x1, COM<x> trans x 8 (TX + RX)
Cellular LED status	Searching network: Slow flashing (200ms ON/1800ms OFF) Idle Status: Slow flashing (1800ms ON/200ms OFF) Transmission: Fast flashing (125ms ON/125ms OFF)
Buzzer	Built-in buzzer x 1, for Warning alarm (Programmable)
Reliability	
Alert Tools	External RTC (real-time clock)
Automatic Reboot Trigger	External WDT (watchdog timer)
Physical Characteristics	
Dimensions	128.8mm×117mm×28mm (L×W×H)
Housing	Metal, IP30
Installation	DIN-rail mounting Wall mounting
Weight	470 g (1.04 lb)
Environmental Limits	
Ambient Relative Humidity	5 to 95% (non-condensing)
Operating Temperature	-40 to 85°C (-40 to 185°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Package Contents	
Device	1 x EG324 Lite set with Terminal Block preinstalled

Antenna	Mag-mount Cellular Antenna (SMA Male, 1 meter, 12dBi)
Installation Kit	1 x DIN-rail kit
Power Adapter	Optional, not included as default
Warranty	
Warranty Period	1 years

Dimensions

About Elastel

Elastel Technology Ltd is a global leading design and manufacturing company providing industrial-quality wireless solution for IoT and M2M. Founded in 2018, Elastel leverages its independent research and development and innovation to pursue its core mission: "Streamline IoT communication development, shorten and simplify the process of system implementation"

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

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Technical Support

Send email to Elastel Support center (support@elastel.com) for firmware upgrade, product documents, FAQ, technical support and more.