

# KGW3101/3102/3204

## 1, 2, 4- Serial port DIN-rail Modbus gateway



### » Overview

The KGW3101, KGW3102, and KGW3204 gateways convert between Modbus TCP and Modbus RTU/ASCII protocols. Each Ethernet port can be accessed by up to 16 TCP master/client devices, or 16 TCP slave/server devices. Each serial port can manage up to 128 serial master/slave nodes.

The KGW3101, KGW3102, and KGW3204 Modbus gateways support both Transparent mode and Agent mode. In Transparent mode, the gateway will bypass and translate Modbus commands between Modbus TCP/RTU/ASCII. In Agent mode, the gateway will actively poll the Modbus slave devices and store data in the Modbus' s memory. The Modbus master can retrieve Modbus slave devices' data via the gateway' s memory.

KGW3101/3102/3204 can be widely applied in all kinds of applications in factory automation and industrial segments.

### » Key Features

Convert between Modbus TCP and Modbus RTU/ASCII

1 or 2 Ethernet port and 1, 2, or 4 RS-232/422/485 ports

Supports both Transparent & Agent mode transmission

16 TCP devices per Ethernet port, Client or Server

128 devices per serial port, Master or Slave

Build-in 2KV serial Isolation protection

Metal housing with wide temperature rating (-40 to +75°C)

Certificates : UL61010, Class I Div 2, CE, FCC, RoHS

## » Product Specifications

### > Technical Specification

#### - Ethernet Interface

Protocols: Modbus TCP

Number of ports:

KGW3101/KGW3102: 1

KGW3204: 2

Speed: 10/100 Mbps, Auto MDI/MDIX

Connector: RJ45

Magnetic Isolation Protection: 1.5 kV (built-in)

#### - Serial Interface

Protocols: Modbus RTU/ASCII

Number of ports:

KGW3101: 1

KGW3102: 2

KGW3204: 4

Serial Standards: RS-232/422/485, software selectable

Connector: DB9 male

ESD Protection: 15 kV for all signals

Isolation Protection: 2 kV (build-in)

DIP-Switch: Enable/Disable 120Ω matching resistor for RS485

#### - Serial Communication Parameters

Data Bits: 7 or 8

Stop Bits: 1 or 2

Parity: None, Even, Odd, Space, Mark

Flow Control: XON/XOFF, RTS/CTS, None

Baudrate: 300bps to 460.8kbps

#### - Security

Security Protocols : HTTPS, SSH2

**-LED**

System: PWR1, PWR2, Run

Serial port: S1-T/R、 S2-T/R、 S3-T/R、 S4-T/R

LAN: SPEED, ACT/LINK (RJ 45)

**-Button**

Reset: Supports "reset to factory default settings"

**-Physical Characteristics**

Housing: Aluminum

Weight:

KGW3101: 165g

KGW3102: 170g

KGW3204: 320g

Dimension:

KGW3101/KGW3102: 30×115×68 mm ( W×H×D )

KGW3204: 54×134×106 mm ( W×H×D )

Protection level: IP40

Installation: DIN-rail mounting

**-Environmental Limits**

Operating temperature: -40 to 75°C

Storage temperature: -40 to 85°C

Operating humidity: 5 to 95% RH

**-Power Requirements**

Input voltage : 12 to 48 VDC, recommended 24 VDC

Power plug: 4-pin terminal block

Power Consumption:

□KGW3101/3102: 1.8W

□KGW3204): 3.2W

Overload protection: Support

Reverse protection: Support

Redundancy protection: Support

**-Standards and Certifications**

Approvals: UL61010, Class I Div 2, CE, FCC, RoHS

Hazardous Location: UL61010, Class I Div 2

EMI:

EN 55032

FCC Part 15 Subpart B Class A

EMS:

EN 55024

IEC61000-4-2(ESD):  $\pm 6\text{kV}$ (contact),  $\pm 8\text{kV}$ (air)

IEC 61000-4-3(RS): 10V/m (80MHz–2GHz,)

IEC61000-4-4(EFT): Power Port:  $\pm 2\text{kV}$ ; Data Port:  $\pm 1\text{kV}$

IEC61000-4-5(Surge): PowerPort:  $\pm 1\text{kV}/\text{DM}$ ,  $\pm 2\text{kV}/\text{CM}$ ; Data Port:  $\pm 1\text{kV}$

IEC 61000-4-6(CS): 10V(150KHz-80MHz)

Machinery:

IEC60068-2-6(Vibration)

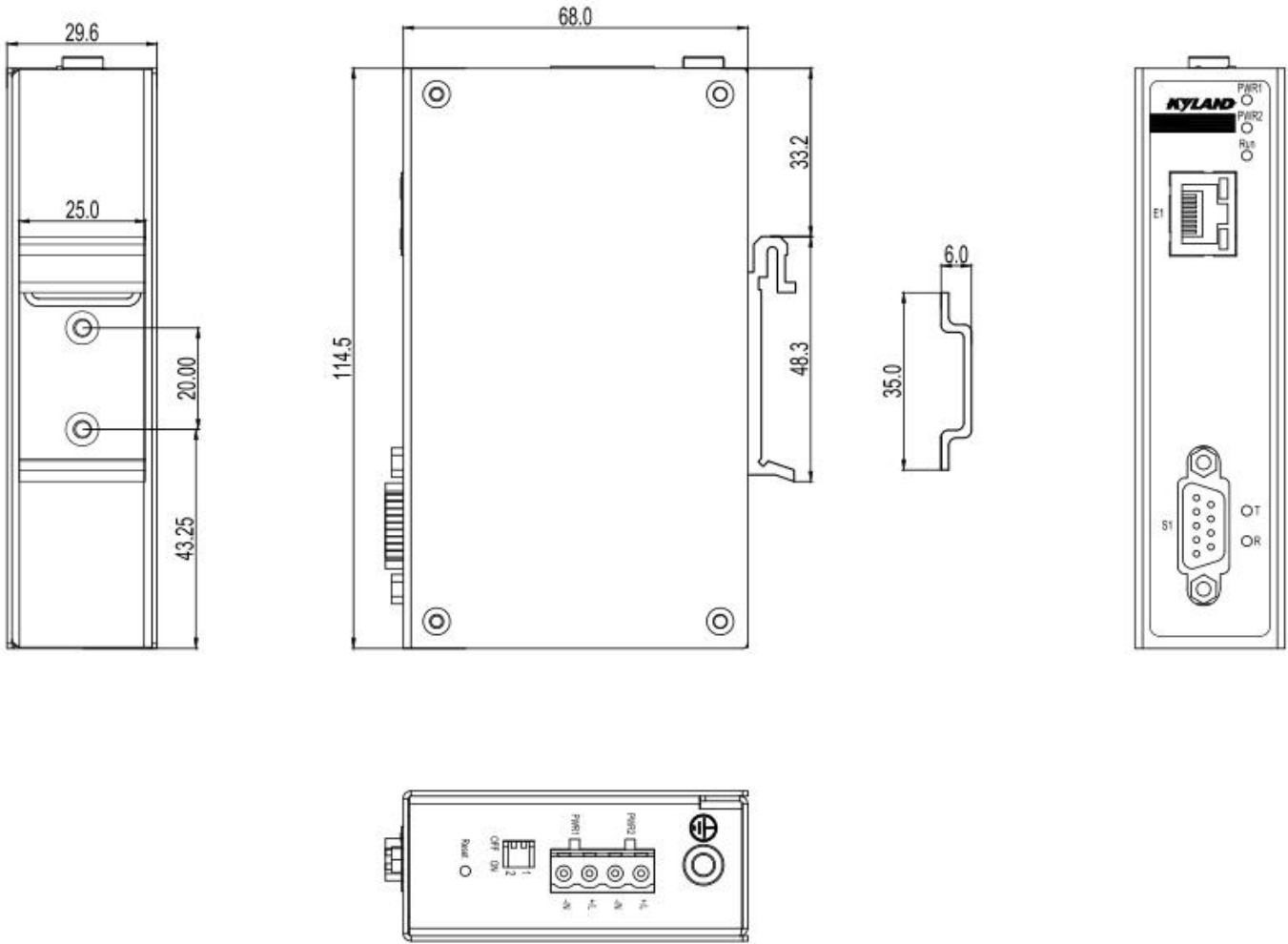
IEC60068-2-27(Shock)

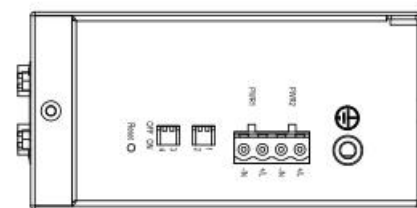
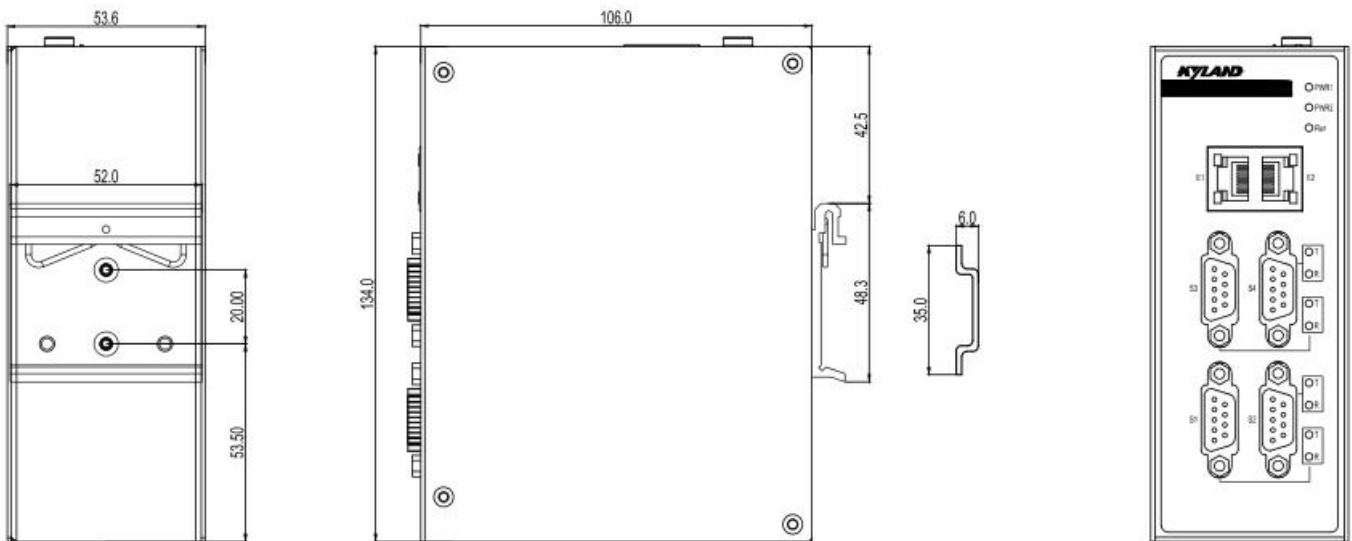
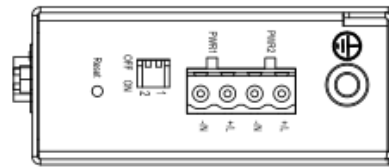
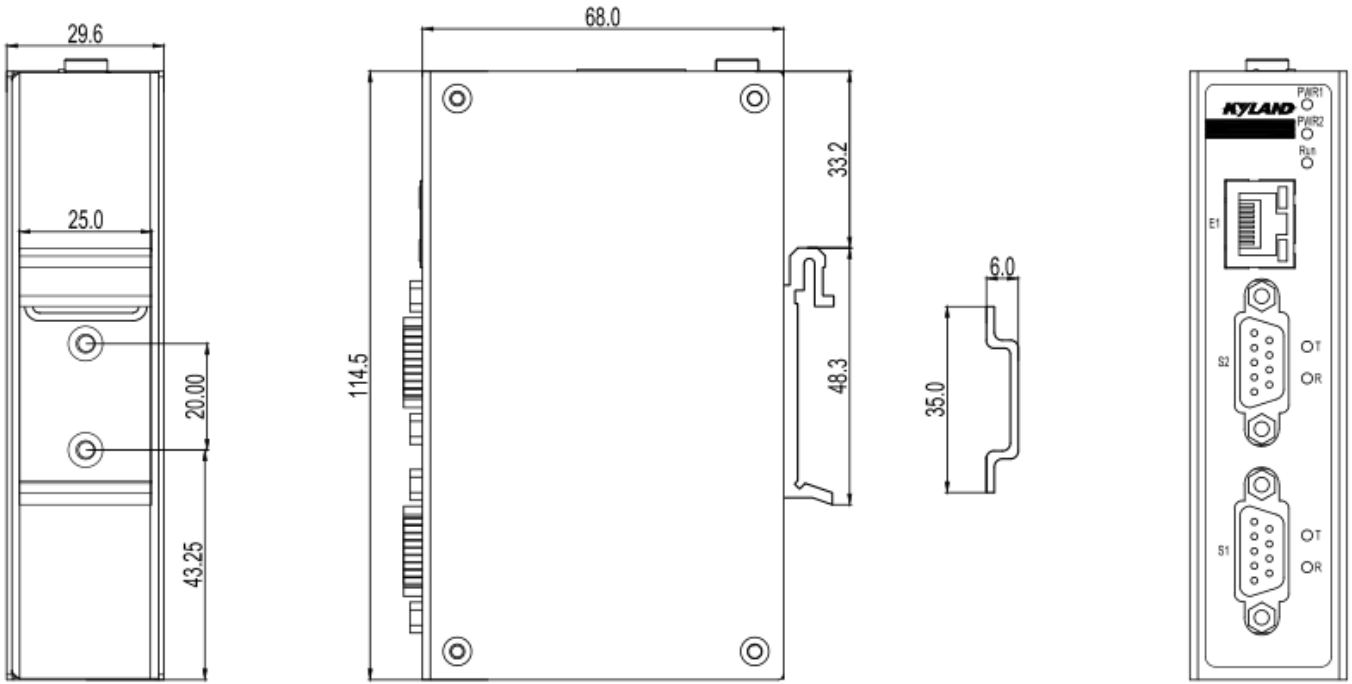
IEC60068-2-32(Free Fall)

### **-Warranty**

Warranty Period: 5 years

## **» Mechanical Drawing**





**» Ordering Information****Available Models**

**KGW3101-1T1D-L17-L17:** 1-port standard Modbus gateway

**KGW3102-1T2D-L17-L17:** 2-port standard Modbus gateway

**KGW3204-2T4D-L17-L17:** 4-port standard Modbus gateway

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