

GENERAL INTRODUCTION

The EPL-GSM-100 is an industrial gateway that performs protocol conversion between Modbus TCP clients and Modbus RTU slave devices, with a GSM modem for remote monitoring and control via SMS. SCADA systems, HMI panels and BMS software send Modbus TCP requests over Ethernet, and the unit delivers them to PLCs, meters, sensors and actuators on the RS-485 line. A key feature of the EPL-GSM-100 is its ability to operate in environments without a fixed Internet connection. The GSM modem enables remote operators to send SMS commands to query device status or trigger control actions, and the gateway can proactively send SMS alerts when alarm conditions are detected. The unit is built on an ESP32-C3 microcontroller with an Ethernet controller and runs FreeRTOS-based multitasking firmware. Wi-Fi and Bluetooth interfaces are present on the ESP32-C3 and are reserved for future firmware features.



Key Feature:

Modbus TCP/RTU conversion for up to 32 slave devices over RS-485 port with a GSM modem for remote monitoring and control.

ADVANTAGES

Remote Control Where the Network Ends

When there is no Internet connection on site, authorised operators send an SMS command and receive data or trigger control actions within seconds — no site visit required.

Proactive Alerts Before the Phone Rings

Configured alarm rules send an SMS notification the moment a fault condition is detected, and a recovery message when it clears. Faults are reported before the customer notices them.

TECHNICAL SPECIFICATIONS

GENERAL

Brand	Energyplus
Country of Origin	Türkiye
Conformity	CE
Firmware Version	V1.0.46

ELECTRICAL RATINGS

Supply Voltage	24 VDC $\pm 5\%$
Power Consumption	≤ 3 W

WIRING DIAGRAM & INSTALLATION

The top face carries the 24 VDC supply (PWR) and RS-485 port, which is wired S-A-B-G (GND). The LAN-1 Ethernet port and SIM are on the bottom face. The unit mounts on a DIN rail.

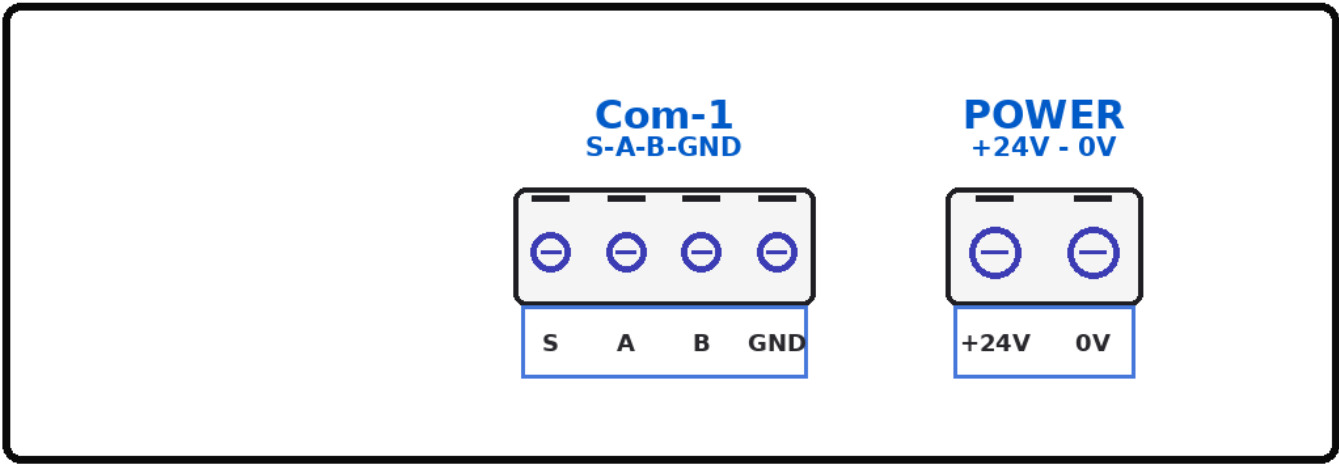


Figure 1 – Modbus and Power Port Layout

PHYSICAL DIMENSIONS

DIMENSIONS AND WEIGHT	
Dimensions (W x D x H)	90 x 70 x 32 mm
Weight	200 g
Mounting Type	DIN Rail / Ray (TS35)

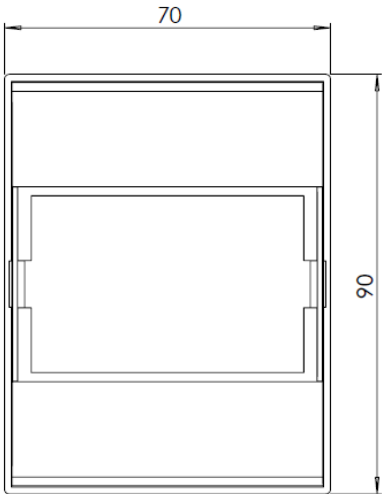


Figure 2 – Box dimensions including the outer lid

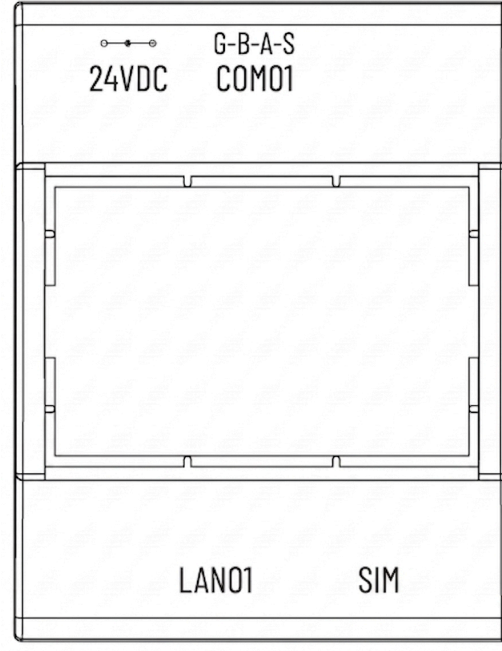


Figure 3 – Distribution of ports