

**IoT Gateway / Smart RTU / IIoT Controller
with High speed 600MHz 32 Bit ARM Processor**

■ Features

- Based on High speed 600MHz 32Bit ARM Processor
- 2 x 10/100 Independent Ethernet ports
- Onboard 4G modem & WiFi & LoRa network Options
- Onboard UPS for Data loss prevention and fail safe operation

■ Specifications

System

Processor	600MHz 32 Bit ARM Processor
Software Features	IEC61131-3 / Node-RED / Python TLS 1.2 + encrypted cloud communication Over the air firmware update
Communication Drivers	Master/Client drivers : Modbus (Default), OPC UA Server / Client, MQTT Options : DLMS, IEC60870, SIMATIC S7, MELSEC
Cloud Service Compatibility	MS-Azure IoT Hub, AWS IoT, PTC Thingworks, Hosted servers, Dedicated own servers
Cloud Protocols	HTTPS, AMQP, MQTT, PTC Always ON, OPC-UA

Power

Power Input	Input Supply : 24VDC +/- 10%
UPS Function	Data loss prevention and fail safe operation

Storage

Storage	1 x uSD Card Slot for Data Logging & Program storage
----------------	---

I/O

Wireless / Connectivity	4G GSM Modem with SIM Slot (Optional) WiFi 802.11 a/b/g/n (Optional) LoRa Master/Slave (Optional)
DIO	Dxx Model : 4 x Digital Inputs (DI1 - DI4), 24VDC PNP Dxx Model : 4 x Digital Outputs (DO1 - DO4), 24VDC / 200mA PNP
AIO	N.A
Serial Port	COM 1 & COM 2 : RS485 (4W/2W) COM 3 : RS485 (4W) , COM 4 : RS485 (2W)
Ethernet	2 x 10/100Mbps Ethernet

Environment

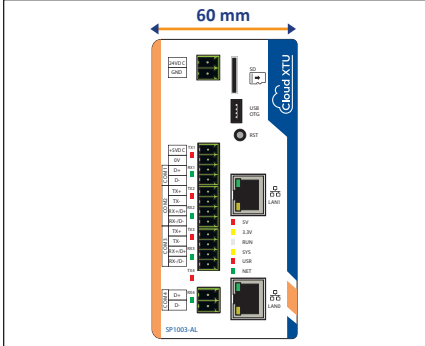
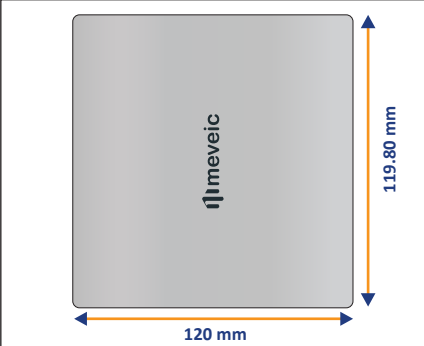
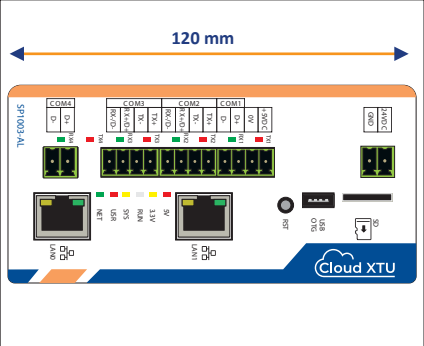
Operating Temp.	0°C ~ 60°C
Humidity	10% to 90% (Non condensing)

Physical

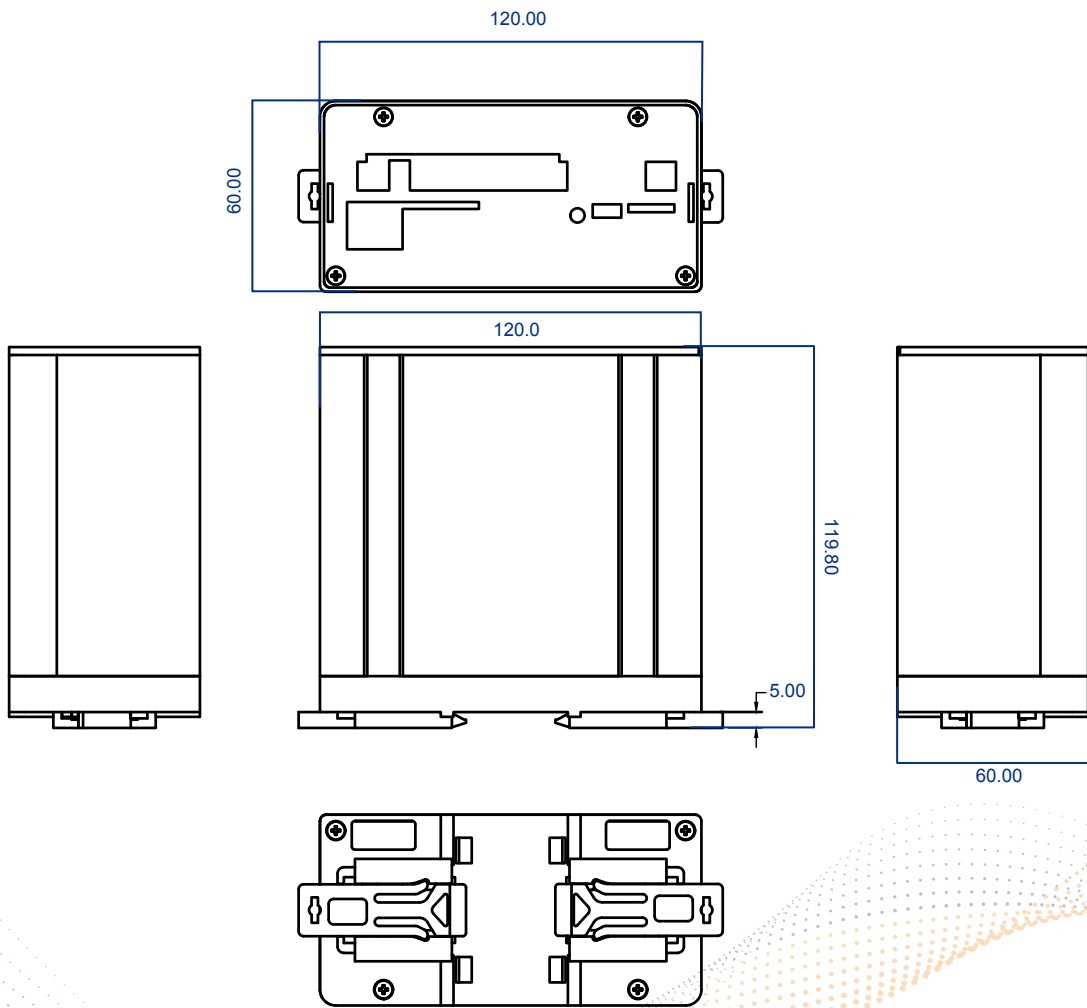
Mounting	DIN Rail / Wall mount IP30
Dimensions (W x H x D) (mm)	60 x 120 x 119.80
Enclosure	Aluminium Enclosure
Weight	300 gm approximately

■ Product I/O View

SP1003-2E-AL



■ Mechanical Drawings (Unit = mm)



Parameter	SP1003-2E-AL
Processor	600MHz 32 Bit ARM Processor
Wireless / Connectivity	4G GSM Modem with SIM Slot (Optional)
	WiFi 802.11 a/b/g/n (Optional)
	LoRa Master/Slave (Optional)
I/O	Dxx Model : 4 x Digital Inputs (DI1 - DI4), 24VDC PNP
	Dxx Model : 4 x Digital Outputs (DO1 - DO4), 24VDC / 200mA PNP
Communication Interface	COM 1 & COM 2 : RS485 (4W/2W)
	COM 3 : RS485 (2W)
	COM 4 : RS485 (2W)
	2 x 10/100Mbps Ethernet
Storage	1 x uSD Card Slot for Data Logging & Program storage
UPS Function	Data loss prevention and fail safe operation
Power Input	Input Supply : 24VDC +/- 10%
Operating Temperature	0°C - 60°C
Software Features	IEC61131-3 / Node-RED / Python
	TLS 1.2 + encrypted cloud communication
	Over The Air Firmware Update
Communication Drivers	Master/Client drivers : Modbus (Default), OPC UA Server / Client, MQTT
	Options : DLMS, IEC60870, SIMATIC S7, MELSEC
Cloud Service Compatibility	MS-Azure IoT Hub, AWS IoT, PTC Thingworks, Hosted servers, Dedicated own servers
Cloud Protocols	HTTPS, AMQP, MQTT, PTC Always ON, OPC-UA
Product Dimensions (mm)	60 x 120 x 119.80 (W x H x D)
Certification	CE & BIS Certified
Mounting	DIN Rail / Wall mount IP30
Enclosure	Aluminium Enclosure

Ordering Codes

Model Number	Description
SP1003-2E-AL - x - x 01 02	
01. Connectivity	02. IOs
4G :- Onboard 4G Modem	D0404 :- 4 x Digital Input, 4 x Digital Output
WL :- WiFi Client / AP	D0800 :- 8 x Digital Input
LoRa :- LoRa Master/Slave	D0008 :- 8 x Digital Output
SP1003-2E-AL - 4G-WL-LoRa - D0404	600 MHz CPU with 2 x 10/100 Ethernet , 4 x Serial Port RS 485/422 (4w/2w) Onboard 4G Modem , WiFi Client / AP , LoRa Master/Slave , Aluminium Enclosure

SP1003-2E-AL-02-07-2026