

## Introducing SP-1000 Series

## Smart RTU & Intelligent IoT Controller / Gateway



CloudXTU

### SP-1000 Series IIoT Controller / Gateway & Smart RTU

#### FEATURES

- Processor : High speed 32Bit ARM Processor
- Equipped with upto 2x10/100 Ethernet interface
- Onboard 4G modem & W/L networks
- Onboard UPS : for Data loss prevention and fail safe operation
- Onboard 4 DI, 4 DO and 2 AI, expandable upto 512 IOs

#### PRODUCT OVERVIEW

SP-1000 is a control unit powered by the latest generation 32Bit ARM CPU is designed to work as Smart RTU & programable IIoT Gateway / Controller.

It support programming in IEC61131-3 standard 5 programming languages. This Controller also available optionally with Node-RED, Python programming or Bare metal Linux device.

## SPECIFICATIONS

Parameter	Description
<b>Processor</b>	High speed 32Bit ARM Processor
<b>Wireless / Connectivity</b>	4G GSM Modem with SIM Slot
	WiFi 802.11 a/b/g/n (Optional)
	RF Modem
<b>I/O</b>	Dxx Model : 4 x Digital Inputs (DI1 - DI4), 24VDC PNP
	Dxx Model : 4 x Digital Outputs (DO1 - DO4), 24VDC / 200mA PNP
	Dxx Model : 2 x Analog Inputs (AI1 - AI2), 0 - 10V
<b>Communication Interface</b>	Dxx Model : 1 x RS485 (COM1) (4W / 2W) 4S Model : Optional 4 x RS485 (4W/2W)
	Dxx Model : 1 x RS485 (COM2) (4W) / 4S Model : NA
	Dxx Model : 1 x RS232 (COM3) / 4S Model : NA
	1 x 10/100Mbps Ethernet / 2E Model : 2 x 10/100Mbps Ethernet
<b>Storage</b>	1 x uSD Card Slot
<b>UPS Function</b>	Data loss prevention and fail safe operation
<b>Power Input</b>	Input Supply : 24VDC +/- 10%
<b>Operating Temperature</b>	0 - 60 Deg. C
<b>Enclosure / Protection</b>	DIN Rail / Wall mount IP30
<b>Software Features</b>	IEC61131-3 / Node-RED / Python
	TLS 1.2 + encrypted cloud communication
	Over the air firmware update
<b>Communication Drivers</b>	Master/Client drivers : Modbus (Default), OPC UA Server / Client, MQTT
	Options : DLMS, IEC60870, SIMATIC S7, MELSEC
<b>Cloud Service Compatibility</b>	MS-Azure IoT Hub, AWS IoT, PTC Thingworks, Hosted servers, Dedicated own servers
<b>Cloud Protocols</b>	HTTPS, AMQP, MQTT, PTC Always ON, OPC-UA

## MODEL SELECTION

SP-1001 - 500 MHz CPU with 1x 10/100 Ethernet,4x Serial Port RS 485/422 (4w/2w)

SP-1002 - 800 MHz CPU with 1x 10/100 Ethernet,4x Serial Port RS 485/422 (4w/2w)

SP-1003 - 900 MHz CPU with 2x 10/100 Ethernet,4x Serial Port RS 485/422 (4w/2w)

SP100x - x - x  
01 02 03

### 01. Processor

1 :- 500 MHz CPU  
2 :- 800 MHz CPU  
3 :- 900 MHz CPU

### 02. Connectivity

4G :- Onboard 4G Modem  
WL :- WiFi Client / AP  
4G-WL :- Onboard 4G Modem, WiFi  
None :- No Wireless Connectivity

### 03. IOs

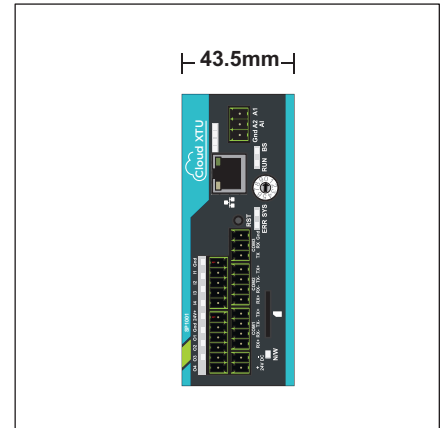
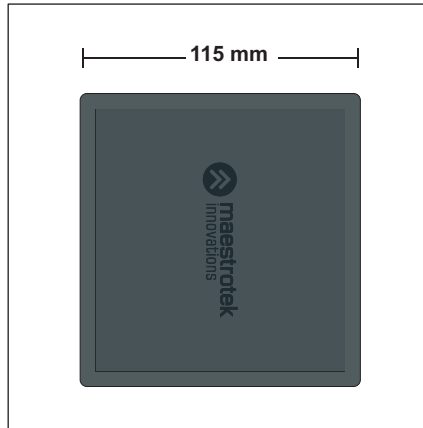
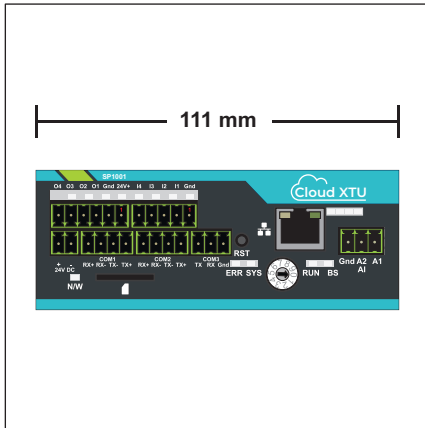
D0404-A02 :- 4 x Digital Input, 4 x Digital Output & 2 x Analog Input  
8 DI :- 8 x Digital Input  
8 DO :- 8 x Digital Output  
4 AI :- 4 x Analog Input  
None

SP-1001 - 4G-WL- D0404-A02

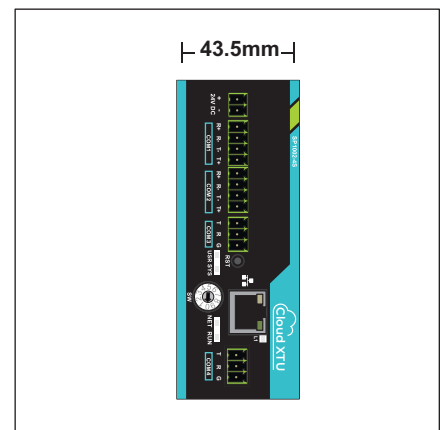
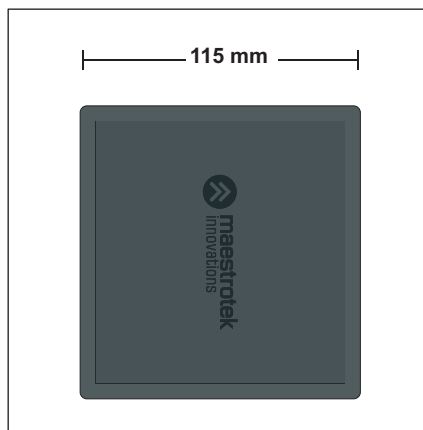
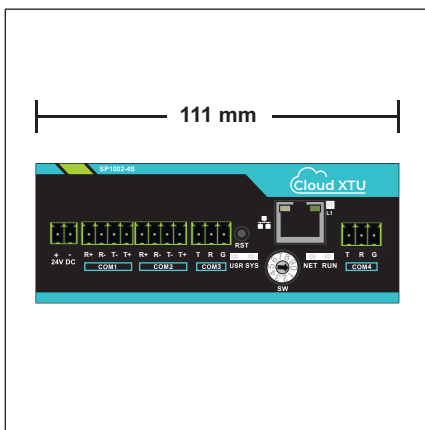
500 MHz CPU with 1x 10/100 Ethernet,4x Serial Port RS 485/422 (4w/2w) ,Onboard 4G Modem, Wireless Network, 4 x Digital Input, 4 x Digital Output & 2 x Analog Input.

## PRODUCT DIMENSIONS

### SP-1001



### SP-1002



### SP-1003

