

Common Resources

Source of common resources used across the Open IoT and IIoT Gateways documentation

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Tables

Specifications

Redisage PN		P01	P02
Ports	RS232	-	-
	RS485	-	-
	RS232/RS485	2x	2x
Microcontroller		ESP32	
Wi-Fi®		N/A	802.11 b/g/n 150 Mbps / 2.4 GHz
SMA socket connector for 2.4G antenna		:x:	:white_check_mark:
Tactile switch		:white_check_mark:	:x:
Power	Voltage	12-30 VDC	
	Power	< 1 W	
Frame ground protection		yes	
Baud rate		up to 115200 bps	
LED indicators		power, link activity, programmable RGB	
RS485 termination		120 ohm manually enabled	
Connector	RS232/RS485	8-pin terminal block max. 2.5 mm ² wire	

Redisage PN		P01	P02
Power	3-pin terminal block max. 2.5 mm ² wire		
Ethernet	RJ45		
Transmission distance	RS485	max. 1,200 m at 9.6 kbps; max. 400 m at 115.2 kbps (Belden 9841 2P twisted-pair cable, if different cables are used, the transmission distance may change)	
	RS232	max. 15 m at 115.2 kbps	
Mounting and enclosure	DIN rail, plastic PA - UL 94 V0, black/green		
Temperatures	-40°C to +75°C operating and storage		
Humidity	10 - 90% RH, non-condensing		
ESD protection	±4 kV contact discharge / ±8 kV air discharge		
Certification	CE, RoHS, EMC, LVD		
Norms	61000-6-2 - Immunity standard for industrial environments 61000-6-4 - Emission standard for industrial environments		

Pin assignments

P01

P01 Open IoT Ethernet Gateway



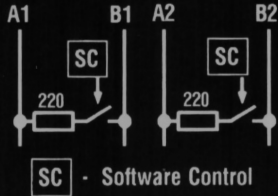
012345678901234

Power: 12-30V/DC < 1W
 Temperature: -40°C + 75°C
 Port: 2xRS232/RS485 ETH
 Ethernet: 10/100BaseT
 MAC Add: #####MAC1#####
 REV1 MADE IN EU

4	Vin	8	Tx2	12	A2	Ethernet RJ45
3	Gnd	7	Rx2	11	B2	
2	Din	6	Tx1	10	A1	
1	FG	5	Rx1	9	B1	



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P02

P02 Open IoT Wi-Fi Ethernet Gateway



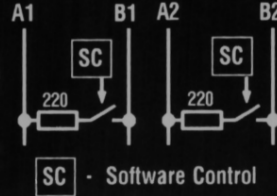
012345678901234

Power: 12-30V/DC < 1W
 Temperature: -40°C + 75°C
 Port: 2xRS232/RS485 ETH
 Wi-Fi: 802.11b/g/n
 Ethernet: 10/100BaseT
 MAC Add: #####MAC1#####
 REV1 MADE IN EU

4	Vin	8	Tx2	12	A2	Ethernet RJ45
3	Gnd	7	Rx2	11	B2	
2	Din	6	Tx1	10	A1	
1	FG	5	Rx1	9	B1	



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Introduction

ESP32 Open IoT and IIoT Gateways (P01 & P02)

Open IoT Gateway is also called as a PAC (Programmable Automation Controller). PAC products combine the functionality and openness of a PC, the reliability of a programmable logic unit like PLC and the intelligence of I/O modules with flexible software tools for a wide range of applications from data acquisition, process control, motion control to energy and building management.

Our PAC family includes FreeRTOS PACs and MicroPython PACs for different requirements in OS, CPU and development platform.

The P01 and P02 Gateways are based on **ESP32 Xtensa LX6**.