Sommario

1. P1R11FA10 - 001 : Connections

1.1 Informations

Release

This document is fully valid, except for errors or omissions.

Release	Description	Date
1.0	New manual.	15/07/16
1.0b	Upgrade points 1.2 and 2.0 on the user manual	02/09/16

Specifications

1.2 Description

The **P1R11FA10 - 001** application, installed on the Qmove *C1-R11-FA10* hardware, it is the Modbus/RTU Slave gateway to the QEM HA548.04 instrument.
Follow we report the main features of the **P1R11FA10 - 001** software.

1.3 Hardware and connections

1.3.1 Main board

1.3.1.1 Power supply

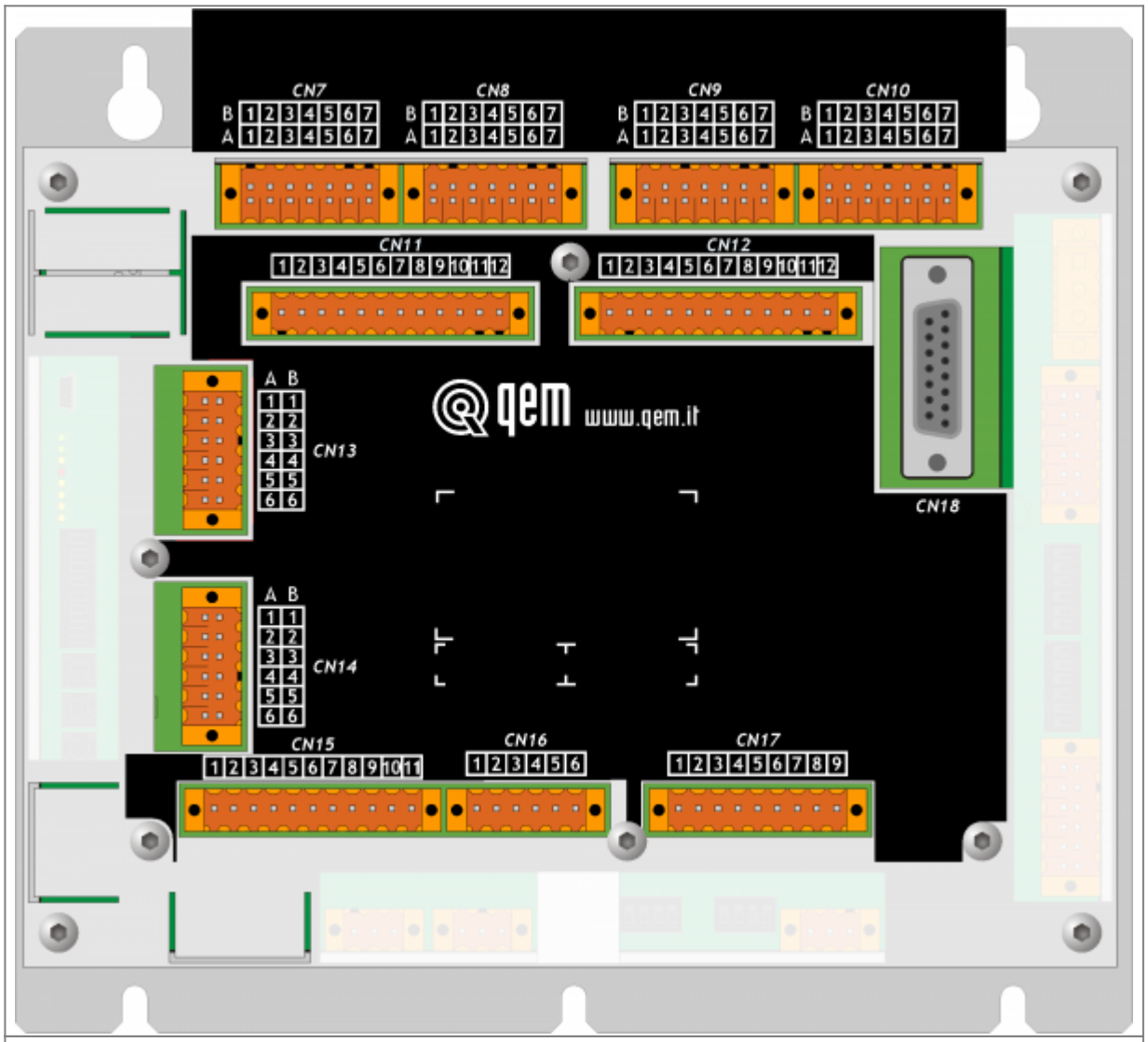
The instrument will need to be supplied with 24Vdc. Isn't necessary the internal fuse.

1.3.1.2 Connectivity

- PROG PORT → TTL logic standard serial port for programming.
- USER PORT → Multistandard (RS232, RS422, RS485) port for MODBUS/RTU Slave.
- PORTA AUX RS485 → RS485 port for HB548.04 connection.

Nr. 1 MMC card reader for saving/storing from external memory.

1.3.1.3 C1-R11



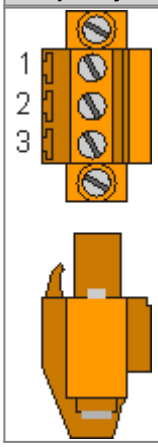
C1-R11 front view

1.4 Electrical connections

1.4.1 C1-R11

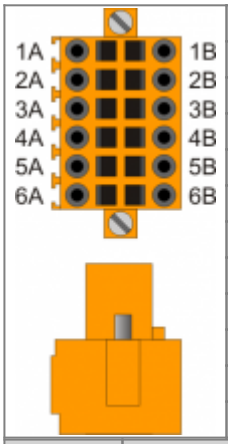
1.4.1.1 CN1- Power supply (power input)

Power supply type	24 Vdc	24 Vac
Valid range	22 ÷ 27 Vdc	+/-15%
Max. absorption	30W	35VA
Frequency		50/60Hz



1	AC phase / positive DC terminal
2	Ground
3	AC phase / 0V DC terminal

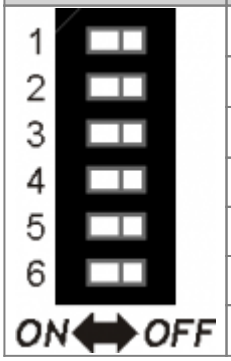
CN2 - USER PORT. RS232-RS422-RS485 serial (insulated)



1A	A – RS485 MODBUS/RTU Slave
2A	B – RS485 MODBUS/RTU Slave
3A	0V - Serial port common.
4A	0V - Serial port common.
5A	TX (Transmission RS232)
6A	PE - Ground.
1B	RX - (Receive “positive” RS422)
2B	RXN - (Receive “negative” RS422)
3B	TX - (Transmission “positive” RS422)
4B	TXN - (Transmission “negative” RS422)
5B	RX (Riceive RS232)
6B	PE - Ground.

NB. The DIP SW2 group under the serial port must be set with ONLY THE 5 DIP = ON.

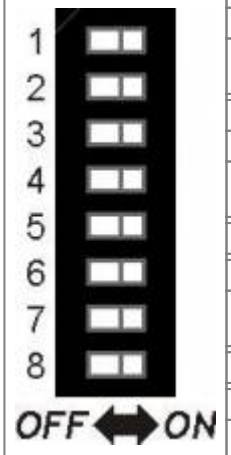
1.4.1.1.1 USER PORT settings

SW2	Num. Dip	Name DIP	Setting of the DIP			Function
	1	JP2	ON	X[1)]	X[2)]	RS485 termination
	2	JP3	ON	X[3)]	X[4)]	RS485 polarizer
	3	JP1	ON	X[5)]	X[6)]	
	4		OFF	ON	OFF	USER PORT electric standard selection
	5		ON	OFF	OFF	
	6		OFF	OFF	ON	
			RS485	**RS422**	**RS232[7)]**	

[1), 2), 3), 4), 5), 6)] X = not significant setting

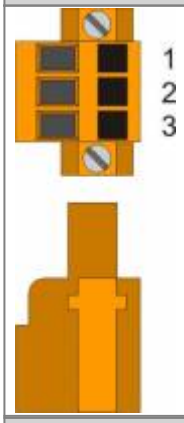
[7)] You can use the USER PORT as PROG PORT with RS232 electric standard, to set ON the DIP-8 SW1 and to set OFF the DIP-6 of SW2

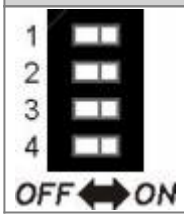
1.4.2 PROG PORT and USER PORT Baud-rate selector

SW1	Dip	DIP setting				Function
	1	OFF	OFF	ON	ON	PROG PORT speed selection of transmission
	2	OFF	ON	OFF	ON	
		Baud-rate 38400	Baud-rate 115200	Baud-rate 19200	Baud-rate 57600	
	3	OFF	OFF	ON	ON	USER PORT speed selection of transmission
	4	OFF	ON	OFF	ON	
		Baud-rate 38400	Baud-rate 115200	Baud-rate 19200	Baud-rate 57600	
	5	CANbus baud-rate selector.				
	6	OFF		ON		PROG PORT mode of operation selection
		PROG PORT can be used by SERCOM and MODBUS device		PROG PORT can't be used by SERCOM and MODBUS device		
	7	CANbus baud-rate selector.				
	8	OFF		ON		Set the USER PORT as PROG PORT[1)]
		Normal PROG PORT		PROG PORT on the USER PORT connector		

[1)] You can use the USER PORT connector as PROG PORT with RS232 electrical standard. The PROG PORT mini-USB connector is disable. **For this function you must set at OFF the dip 6 of the SW2.**

1.4.3 AUX2 PORT

CN4	Terminal	Simbol	Description
	1	0V	RS485 serial common
	2	B	RS485 B terminal - **to connect at the terminal number 2 of the DB9-M connector of the HA548.04**
	3	A	Terminale RS485 A - **to connect at terminal number 8 of the DB9-M connector of the HA548.04**

SW4	Num. Dip	Name Dip	Setting dei DIP	Function
	1	JP3	ON	Polarizer RS485
	2	JP2	ON	Termination RS485
	3	JP1	ON	Polarizer RS485
	4		X[1)]	none

[1)] X = not significant setting

	**You must enable the AUX2 PORT polarizer and termination resistors**