



DATALOGIC

THE VISION IS YOURS

S85 RS-485
serial interface
configuration

Monte san Pietro, May 2014

RS485 serial communication

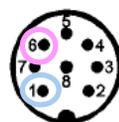
Baud rate= 115200

Parity bit= none

DATA_BIT= 8 bit

STOP_BIT= 1 bit

Output Message = **3 byte** = 24 bit

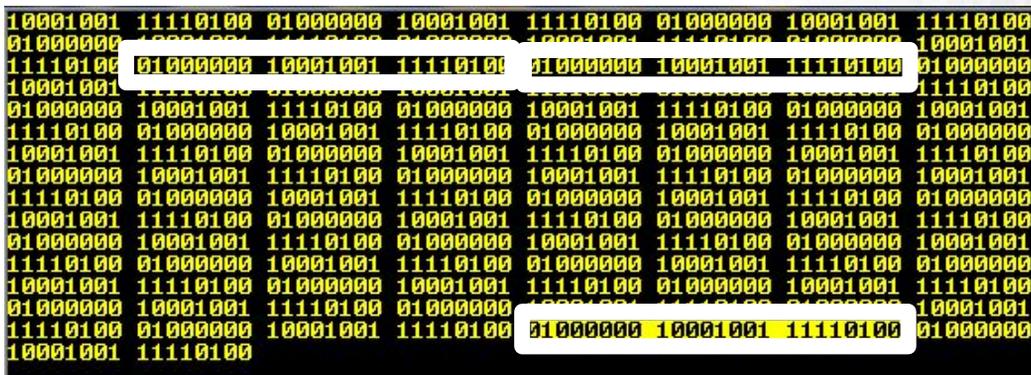


- 1 (WHITE): RS485 -
- 2 (BROWN): +24 V ± 20 %
- 3 (GREEN): ANALOGUE OUT
- 4 (YELLOW): Q1 100mA max.
- 5 (GREY): Q2 100mA max.
- 6 (PINK): RS485 +
- 7 (BLUE): 0 V
- 8 (RED): MULTIFUNC.INPUT

- 1° byte= [01 (byte n°1, fixed) - XX - data [4 bit] (Most Significant Bits)
- 2° byte= [10 (byte n°2, fixed) - data[6 bit]
- 3° byte= [11 (byte n°3, fixed) - data[6 bit] (Least Significant Bits)

⇒ **Data** = Measure = 16 bit

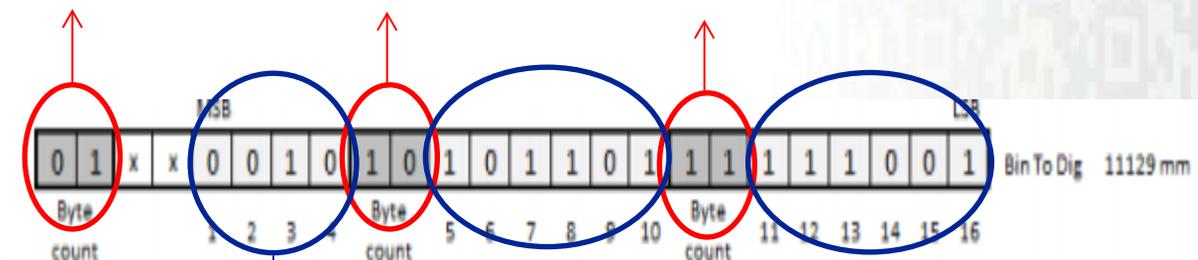
⇒ Binary -> Decimal [es. 0010 101101 111001 = 11129 mm]



BYTE n° 1

BYTE n° 2

BYTE n° 3

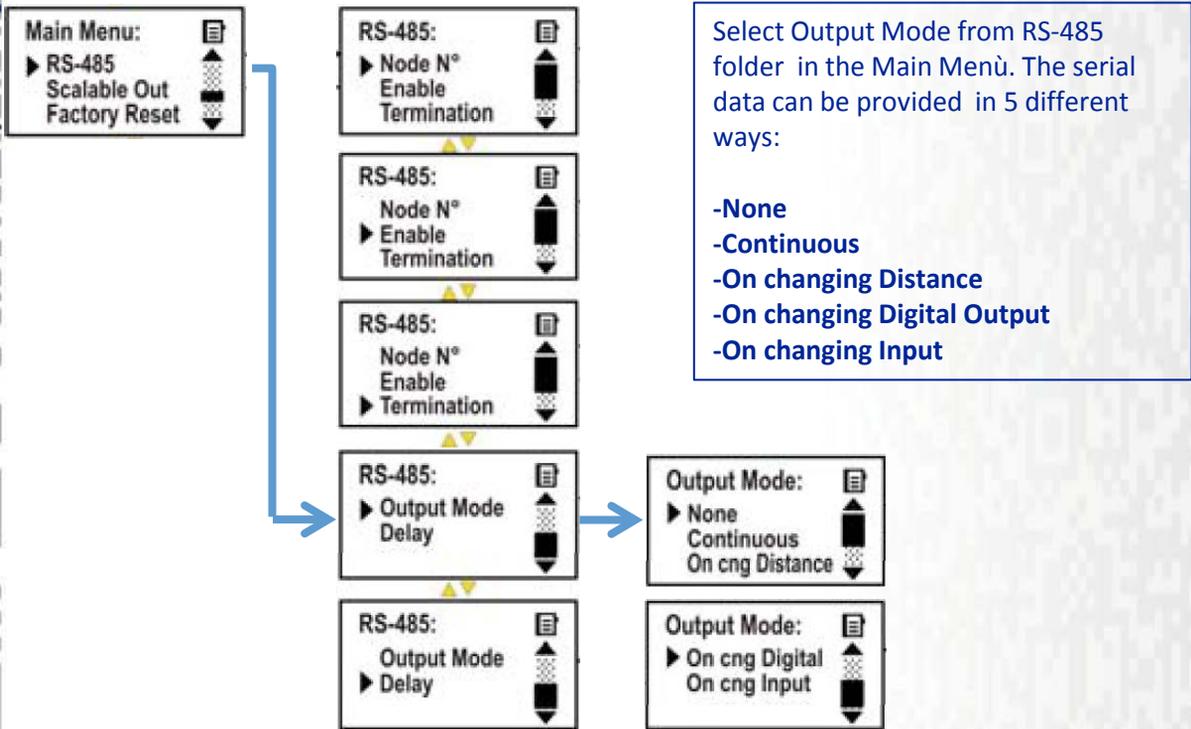


DATA [1...4]

DATA [5...10]

DATA[11...16]

Configuration



-None: the data are provided only after sending to the device an input fixed message, written on the instruction manual), using the same S85 serial interface [bidirectional: pin 1 (RS485-), pin 6 (RS485+)]. This message is 5 byte long and in the third byte is written the Node of requested device. It is the only way to make a multi-drop connection with more than one device.

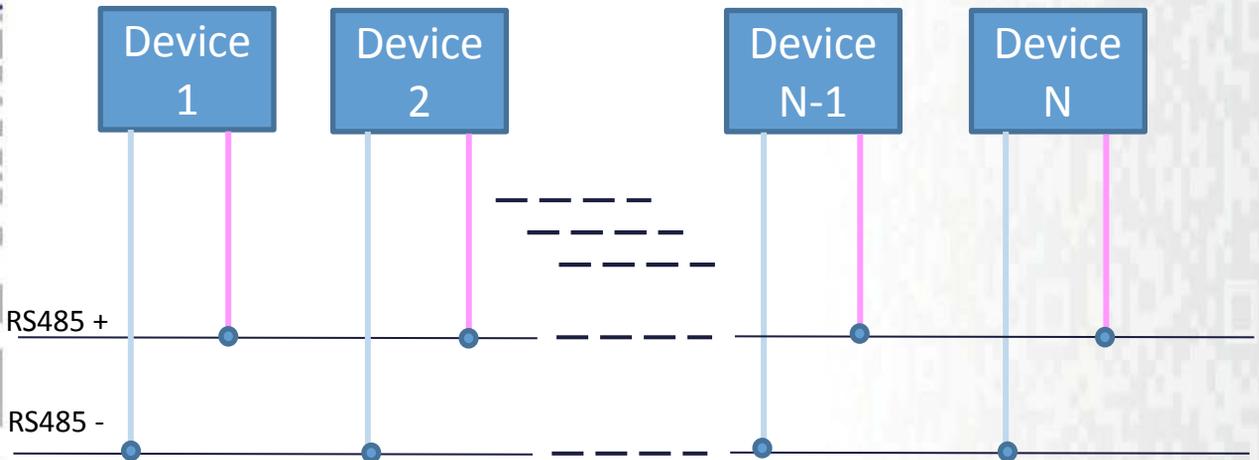
RS-485 Cmd	1 st byte	2 nd byte	3 rd byte	4 th byte	5 th byte
Get Measure	"0x40" hex	"0x43" hex	"Node N" hex	"0x00" hex	"0x01" hex

- Continuous:** the RS485 data are continuously provided for the post-processing
- On changing Distance:** the data are provided only when the distance value changes
- On changing Digital:** the data are provided only when the desired switching point is reached
- On changing Input:** the data are provided through a request given by the remote input (Multifunction Input)

Multi-drop connection



- 1 (WHITE): RS485 -
- 2 (BROWN): +24 V ±20 %
- 3 (GREEN): ANALOGUE OUT
- 4 (YELLOW): Q1 100mA max.
- 5 (GREEN): Q2 100mA max.
- 6 (PINK): RS485 +
- 7 (BLUE): V V
- 8 (RED): MULTIFUNC.INPUT



INPUT message

5 byte



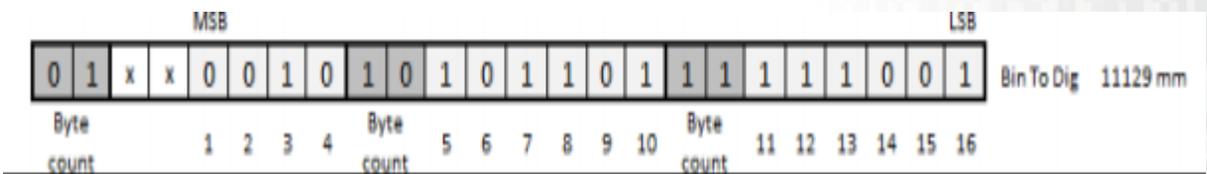
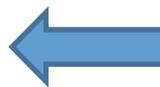
RS-485 Cmd	1 st byte	2 nd byte	3 rd byte	4 th byte	5 th byte
Get Measure	"0x40" hex	"0x43" hex	"Node N" hex	"0x00" hex	"0x01" hex

Device number

OUTPUT message

From requested device

3 byte



Thank you

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