

## RS485 STAR-LIKE NETWORKS



The HUB5X485 distributes RS485 links so as to interconnect PLC's when the network is spread-out and has a star-like structure.

Each RS485 port is isolated. The data is recalibrated in order that each RS485 link keeps its maximum range.

Multiple hubs can be linked by interconnecting the RS485 links.

The data is retransmitted from one serial link to all the others so that it is made compatible with master/ slave protocols (MODBUS, UNITEWAY, DH485, SYSMACWAY), as well as multi-master protocols (PROFIBUS DP).

### Characteristics

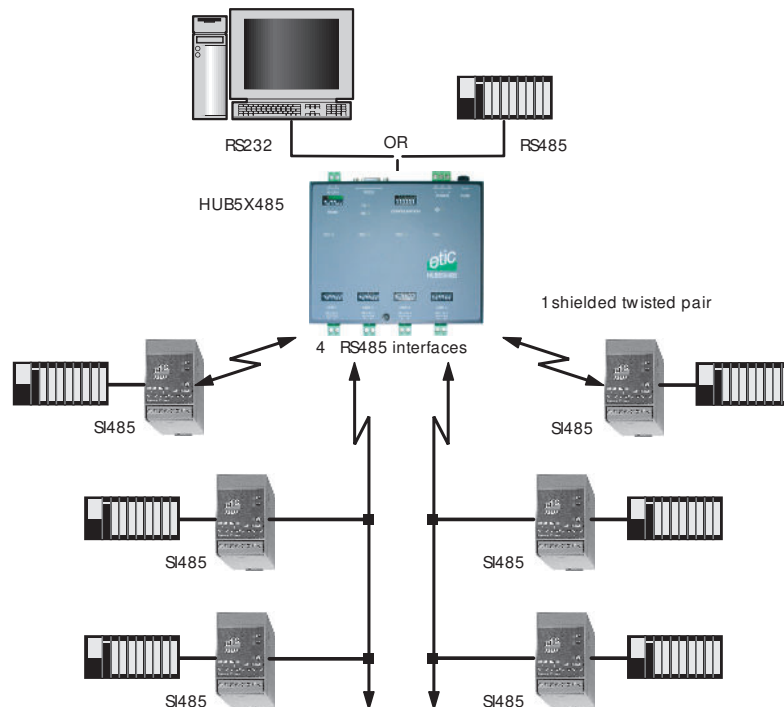
- 4 isolated RS485 ports
- 1 RS232 / RS485 port
- 32 subscribers / RS485 port
- PROFIBUS DP, DH485, DF1, UNI-TELWAY, MODBUS, SYSMACWAY...
- Linkable
- Din rail mounting

### Applications

Star-like RS485 networks



# HUB5X485 RS485 hub



Range	
cable diam. 0,4 mm 50 nF/Km	
Data rate	Km
< 4 800 b/s	2,0
9 600 b/s	1,5
19 200 b/s	1,2
38 400 b/s	1,0
57 600 b/s	1,0
115 200 b/s	0,7

Characteristics	
Dimensions	130 x 138 x 32 mm (h, l, d)
Electrical safety	EN 60950
Power requirements	9 to 40 VDC - 350 mA at 24 VDC
Operating T°	0°C / + 60°C dry air
RS485 lines isolation	2500 V
Ports number	<ul style="list-style-type: none"> <li>■ 4 isolated RS485 ports</li> <li>■ 1 RS232 / RS485 non isolated port</li> </ul>
RS485 lines polarisation and matching	<ul style="list-style-type: none"> <li>■ 2-wire RS485 on screw-clamp connection</li> <li>■ Selection of the 4 matching resistors by switch :                             <ul style="list-style-type: none"> <li>UNI-TELWAY: 120 Ω + 1 nF</li> <li>PROFIBUS DP: 220 Ω</li> <li>PROFIBUS DP: 150 Ω</li> <li>MODBUS: 620 Ω</li> </ul> </li> <li>■ Selection of the polarisation R. by switch : 390 Ohm</li> </ul>
Number of subscribers	32 / RS485 line
Data rate / data frame	<ul style="list-style-type: none"> <li>■ The data rate and the format of the data to all links.</li> <li>■ Frame : 7 or 8 bits</li> <li>■ Parity : none / odd / even</li> <li>■ 1 start, 1 or 2 stops</li> <li>■ 1200 - 2400 - 4800 - 9600 b/s</li> <li>19,2 - 38,4 - 57,6 - 115,2 kb/</li> <li>93,75 - 187,5 kb/s (RS485 only)</li> </ul>
RS232 interface	RX / TX / GROUND / CTS - DB9 F

Designation	Reference
Hub RS485 - 4 isolated RS485 interfaces + 1 RS232	HUB5X485