

## **COMMUNICATION BOARD RS-485 (MC-2004)**

### **Description**

Board for connexion of several peripheral that require RS-485 protocol, has 2 independent gates "with intern protocol adaptable to users needs". Its frontal part is made up of:

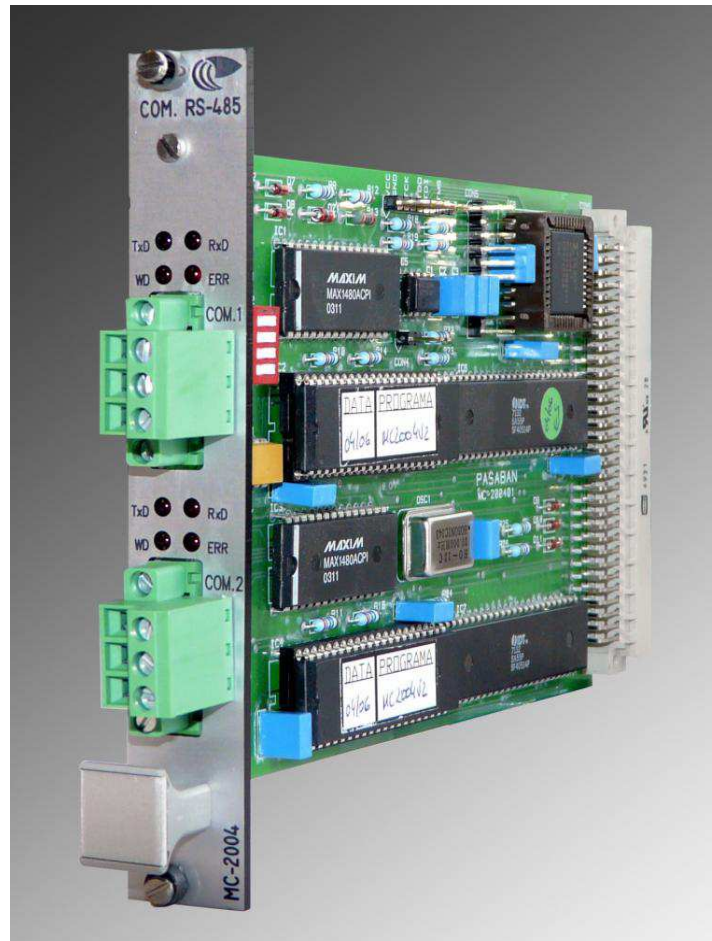
- 2 inputs for RS-485 lines
- 4 LED diodes for each gate, to inform about the communication state:
  - TXD (transmission)      RXD (reception)
  - WATCH DOG (check)    ERR (error in line)

### **Application**

Peripheral that present open and flexible RS-485 protocol for its communication.

- Display controller.
- Motors sep by sep.
- Etc.

It can be used as master communication board.



### **Additional data**

- ✓ Europe board format.
- ✓ 2 communication channels, each of them ruled by a microprocessor.
- ✓ 2 kbytes dualport to communicate with the CPU.
- ✓ CPU opto-isolated channels. Made up of one DC/DC stage, 3 opto-isolated and integrateds for RS-485 communication.
- ✓ Information about each gate communication state through LED diodes.
  - TXD: usually (FLASHING)
  - RXD: usually (FLASHING)
  - WD: usually (FLASHING)
  - ERR: usually (OFF)

### **Common data**

- ✓ Ending line resistor with switch.
- ✓ Device base address according to board position on the RACK.

The cable that is connected in the RS-485 line is the same one as the one used in a Profibus line, with a peculiar characteristic of 120Ω resistor. Each RS-485 communication line has ending resistors.

	Switch				Resistor (Ω)
	1	2	3	4	
Gate 1	0	0			∞
	0	1	X	X	120
	1	0			120
	1	1			60
Gate 2			0	0	∞
	X	X	0	1	120
			1	0	120
			1	1	60