

serial interface 5240



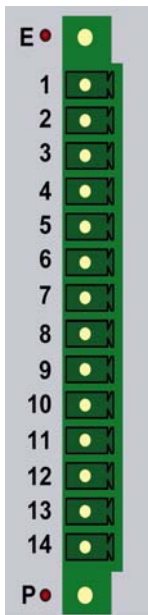
- 2 channel serial interface
- Galvanically isolated
- RS232 Interfaces
- 128 bytes FIFO for all channels
- Handles automatically handshake

I/O

Pinout



LED:	0; (8)	reserved
	1; (9)	reserved
	4; (12)	reserved
	5; (13)	reserved
	E:	failure, red
	P:	power supply, red



Pin	Signal
1	TX1
2	RX1
3	GND
4	RTS1
5	CTS1
6	GND
7	TX2
8	RX2
9	GND
10	RTS2
11	CTS2
12	GND
13	+24V
14	0V

Attributes

Dataformat:

- asynchron serial
- 1 start bit,
- 5,6,7 or 8 data bits,
- parity none/even/odd
- 1 or 2 stop bits

Available prints:

- @P5240L: 2 ch. serial. RS232, RTS, CTS left slot
- @P5240R: 2 ch. serial. RS232, RTS, CTS right slot
- @P5241L: 2 ch. serial. RS232/485, left slot
- @P5241R: 2 ch. serial. RS232/485, right slot
- @P5242L: 2 ch. serial. RS422, left slot
- @P5242R: 2 ch. serial. RS422, right slot
- @P5440L: 4 ch. serial. RS232, left slot
- @P5440R: 4 ch. serial. RS232, right slot
- @P5441L: 4 ch. serial. RS485, left slot
- @P5441R: 4 ch. serial. RS485, right slot

Applications:

Connecting all kinds of devices with serial interfaces such as barcode reader, terminals, modems, data logger, text displays, serial keyboards and many others.

serial

input

Electrical Data

Power supply external.....	24V=+/-20%
Operating current.....	30mA at 24V=, typical
Operating current @ctiveBus.....	55mA at 3,3V, 0mA at 5V
Power supply protection.....	30V overvoltage, surge

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System Information

System ID	0x20C
System address space	64 bit in, 64 bit out

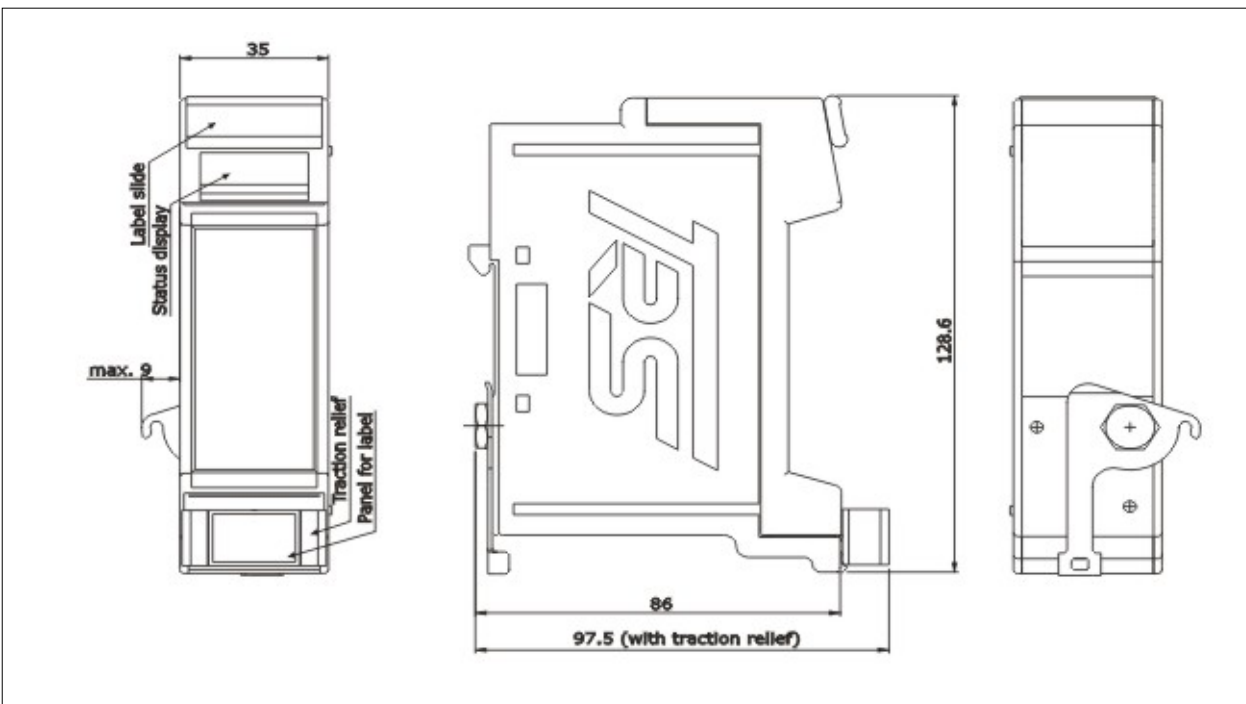
Environmental Conditions

EMC	EN 61000-4-2 (IEC-801-2) / EN 61000-4-4 (IEC-801-4)
operating temperature [°C]	0..+55
storage temperature [°C]	-20 .. +70
humidity (rel)	98 % (non condensing)
protection class*	IP 20 (DIN 40 050)
*The protection class is valid only with housing and connector installed	

Mechanical Data (effective if mounted in @M housing)

Weight	approx. 0,05 kg including connector (PCB only)
Dimension	105mm x 80mm x 12mm (PCB only)

Drawing (effective if mounted in @M housing)



Ordering Key

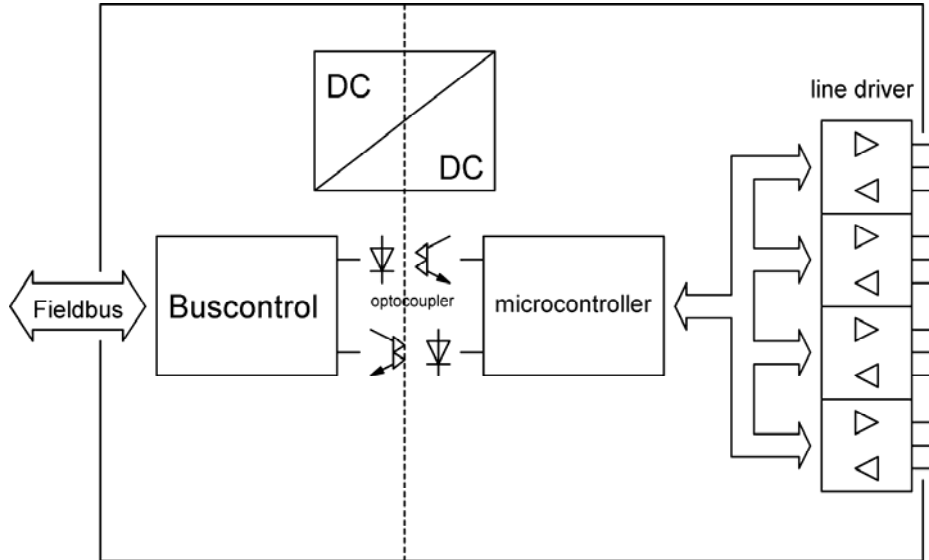
@	P	5	2	4	0	L	-					R	
	P= print only X= print and cap M= print and housing							L= left slot					
		5= Digital Interface							R= right slot				
		2= 2 channel , 4= 4 channel							Description if installed in the right slot.				
		4= Serial Interface											
		0= RS232											

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notes:

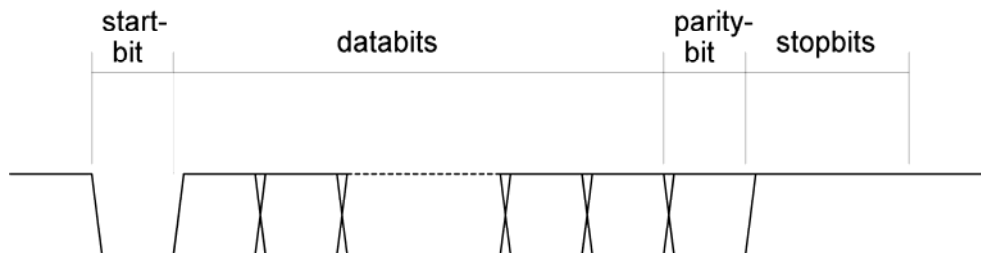
Block diagram



Functional description

The component connects different peripheral devices to the @ctive-IO-Bus. At the heart of the component is a microcontroller. All data from and to the serial interfaces passes over it. The microcontroller is connected to the bus controller using optocoupler. All serial interfaces are separated galvanically from the bus. The interfaces are not individually separated. Depending on the hardware configuration, RS232 or RS485/422 is available. As an option the microcontroller can use handshake-controls (RTS/CTS or XON/XOFF). The microcontroller controls the transmit direction when using RS485. The interface parameters are set by the host computer. Parameters like baud rate, data bits, stop bits and parity are selectable in a large range.

Data format



I/O

serial

input

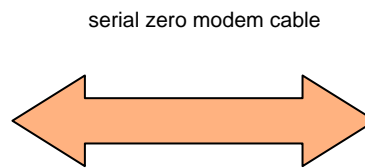
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Example of Application

Interface between different serial devices and @ctiveIO controller.
For example connection to a serial modem.



Standard Modem (28,8k / 33,3k / 56k)



@P5240