

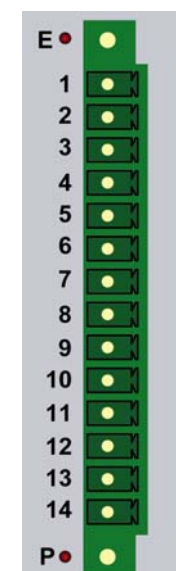
SSI output 5220



- SSI Slave Output interface
- 2 interfaces
- Output voltage +5V RS485
- Input voltage +5V
- Galvanically isolated clock channel

Pinout

0	4	8	12
1	5	9	13
2	6	10	14
3	7	11	15



LED:	
0; (8)	data transfer channel 1
4; (12)	data transfer channel 2
E:	failure, red
P:	powers supply, red

Pin	Signal	
1	D1+	Output
2	D1-	Output
3	C1+	Input
4	C1-	Input
5	D2+	Output
6	D2-	Output
7	C2+	Input
8	C2-	Input
9	Power	VCC
10	Power	0V
11	Power	VCC
12	Power	0V
13	Power	VCC
14	Power	0V

*see notes

Attributes

Dataformat:
2x32 bit format

Applications:
The P5220 allows two SSI masters to be connected directly. Diverse data formats can be adjusted. The master can be powered by the SSI slave interface.

Available prints:

- @P5220L: 2 SSI slave interfaces
- @P5220R: 2 SSI slave interfaces

Related Applications:

- 1 SSI sensor interface
 - @P5100: 1 SSI sensor interface
- 2 SSI sensor interface
 - @P5200: 2 SSI sensor interfaces

Electrical Data

Power supply external.....	GND required see notes, VCC max. +24V ±20%, optional
Operating current.....	20mA at +24 V
Operating current @ctiveBus.....	30mA at +3,3V / 35mA at +5V
Input protection.....	30V overvoltage
SSI-frequency.....	max. 625kHz
Signal output data.....	difference signal (RS485), reference potential 0V from CPU supply
.....	"Low" = < -1,5 to -5V
.....	"High" = > +1,5 to +5V
Signal input clock.....	difference signal (RS485 compatible)
.....	"Low" = < +0,8V
.....	"High" = > +2,1V to +5V at 4mA to 20mA,
.....	(recommended min. +2,8V or 7mA input current)
(*see notes)	

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System Information

System ID 0x020B
 System address space 64 bit in, 64 bit out

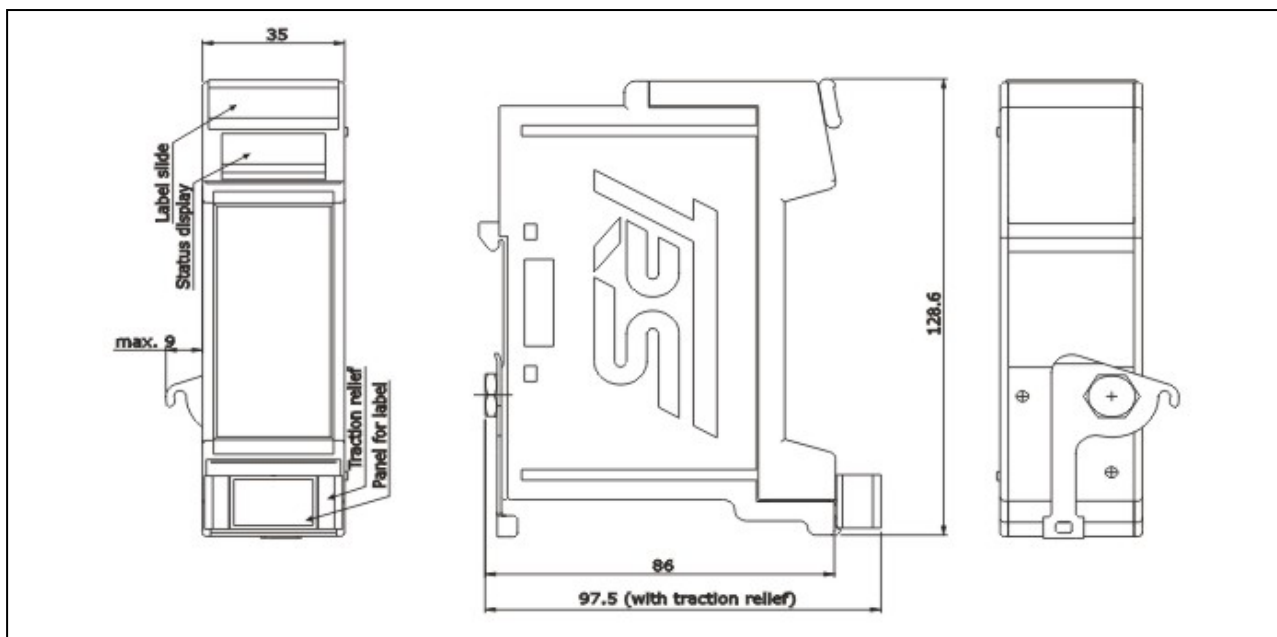
Environmental Conditions

Electromagnetic compatibility (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* IP20 (DIN 40 050)
 *The protection class is valid only with housing and connector installed

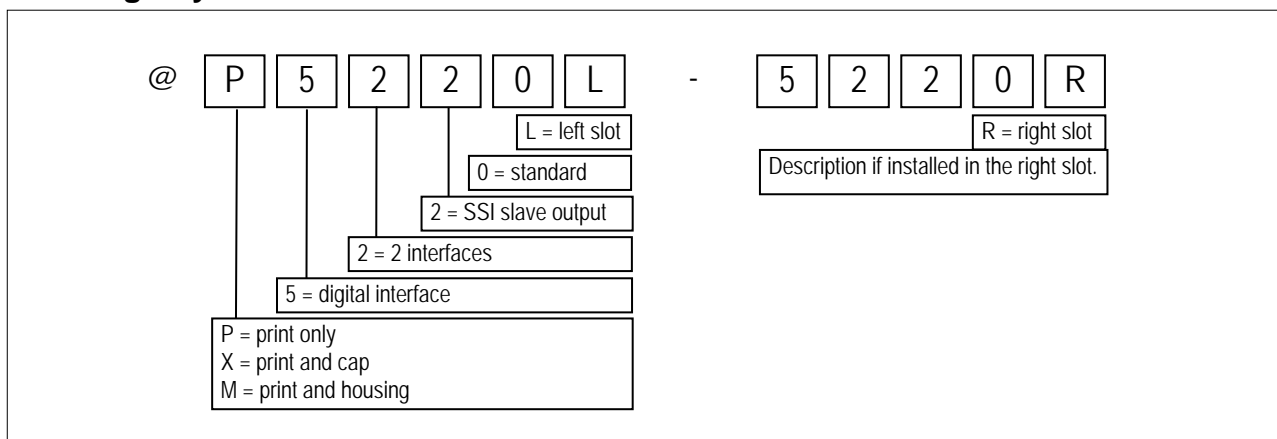
Mechanical Data PCB

Weight approx. 0.05 kg including connector
 Dimension 105mm x 80mm x 12mm

Drawing (effective if mounted in @M housing)



Ordering Key



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notes:

Systembus parameter / status: SSI 1 / 2

Bit	Name	Description
0 / 32	Parameter enable SSI	must be set high to change any function
1 / 33	not defined	
2 / 34	not defined	
3 / 35	not defined	
4 / 36	LSB amount of SSI clock's	amount ssi clock's= amount data bits + 1 min. 5, max. 33 with checksum (bit 14) max. 29
5 / 37		
6 / 38		
7 / 39		
8 / 40	MSB	
9 / 41		
10 / 42	reserved	
11 / 43		
12 / 44	EN_LONG_MON O	default mono pause = 20 μ s, en_long_mono pause = 50 μ s
13 / 45	EN_GRAY	ssi data gray coded
14 / 46	EN_CRC	generate ssi data with 15 bit CRC
15 / 47	not defined	
16 / 48	reserved	
17-31 / 49-63	not defined	

System bus data:

transmit: Bit 31-0 SSI 1 Data, Bit 0 = LSB
 Bit 63-32 SSI 2 Data, Bit 32 = LSB

receive: Bit 30-0 SSI 1 Data, Bit 0 = LSB
 Bit 31 = SSI 1 CLOCK INFO

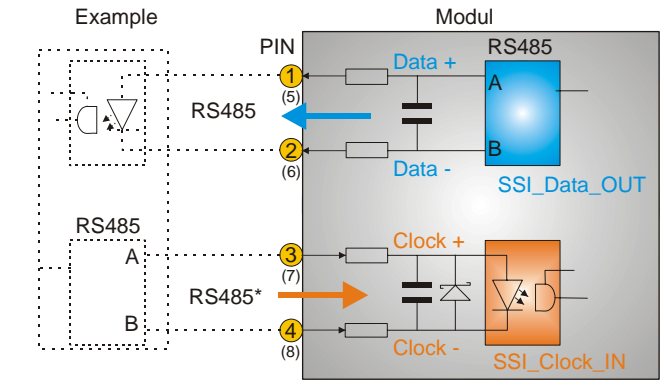
=> Bit 62-32 SSI 2 Data, Bit 32 = LSB
 => Bit 63 = SSI 2 CLOCK INFO

=> SSI CLOCK INFO = 1 -> incoming SSI CLOCK is valid
 => SSI CLOCK INFO = 0 -> no incoming SSI CLOCK, check supply voltage and wiring

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notes:

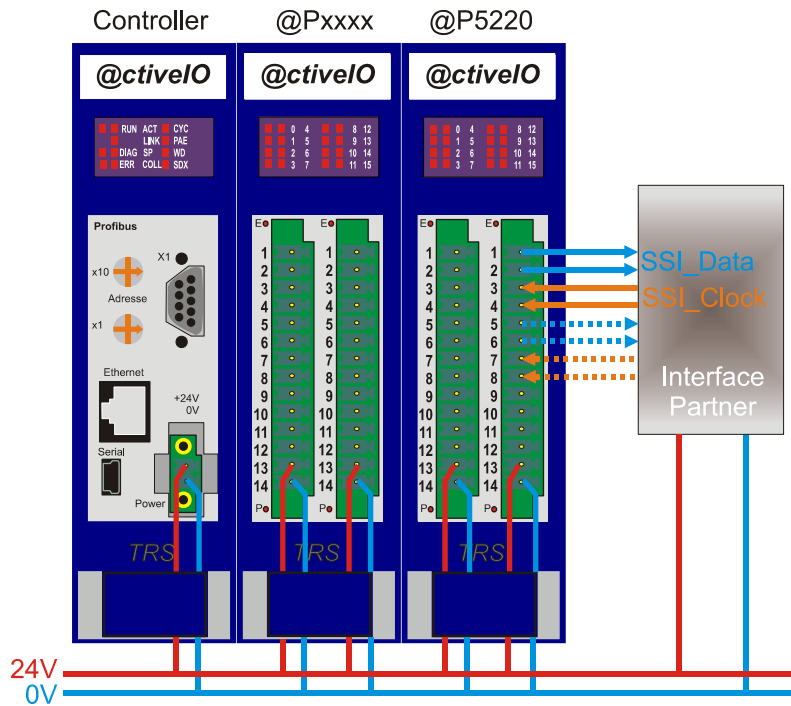
Input / output signal schematic



*see Electrical data

Caution:

Power 0V has to be directly connected with power 0V of the interface partner and power 0V of the controller-module.



Revision change

Version	Description	Date (m/y)
00	Serie 0	12/02
01	Added: operating current at 24V, 5V and 3,3V	09/03
02	Corrected: input signal optocoupler	12/07
03	Added: input / output signal notes	01/08

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