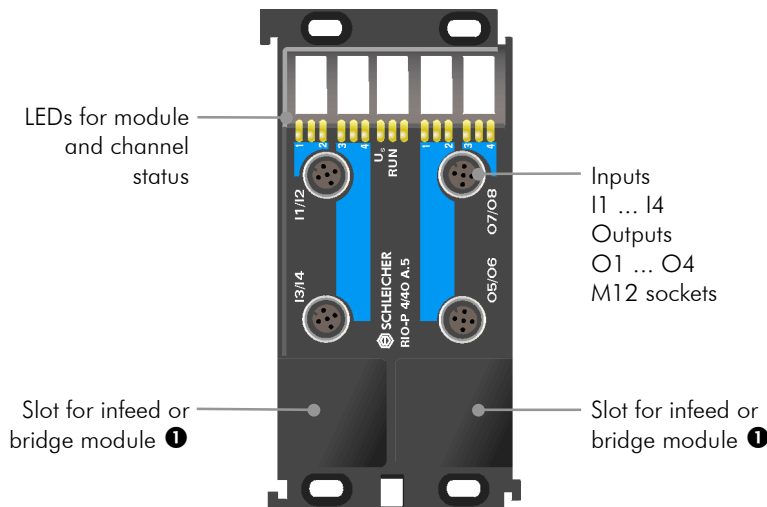


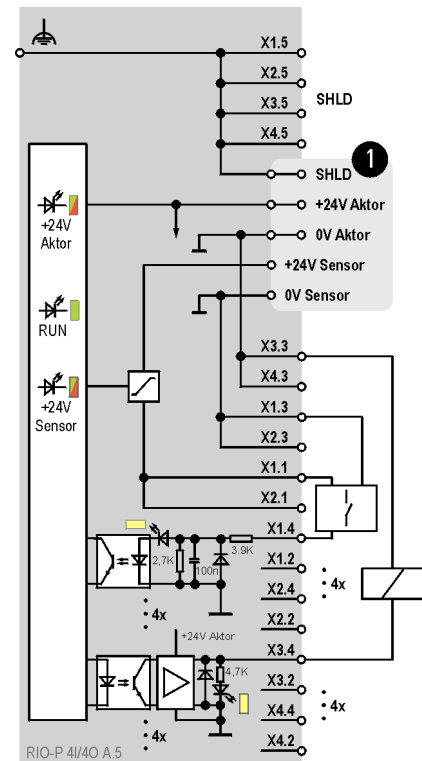
Digital 4 Inputs 4 Outputs DC 24 V 0.5 A

RIO-P 4I/4O A.5



The RIO-P 4I/4O A.5 digital module provides 4 inputs and 4 outputs for binary DC signals with 24 V level. The inputs are suitable for sensors with antivalent switching behaviour. The maximum output current per channel is 0.5 A. If more current is required the outputs can be connected in parallel. The channels are isolated from the internal bus. The signal state of each channel can be read on an LED.

Block diagram



Technical Data	RIO-P 4I/4O A.5
Article number	384 382 81
Number of inputs/outputs	4 inputs and 4 outputs
Data width	1 bit per channel I/O
External supply voltage	DC 24 V ($\pm 20\%$, max. 5% residual ripple)
Power consumption	0.25 W (without input current/load current) from external 24 V supply 0.325 W from internal 5 V supply
Connection system	Sensors: Two/three-wire, actuators two-wire
Inputs	
Switching level	H level +11 ... +30 V / L level -30 ... +5 V
Input current	Min. H level (+11 V) ≥ 2.0 mA / Max. L level (+5 V) ≤ 0.6 mA / Typ. (+24 V) = 5.3 mA
Isolation	Each channel individually isolated from internal bus by optocouplers
Signal delay	Typical 100 μ s (hardware)
Input filter	1.5 ms / 6 ms / none (parameterizable via diagnosis interface)
Current limitation of sensor power supply per module	$I_{max} = 0.4$ A
Outputs	
Switching level	H level: supply voltage -0.5 V ($I_L < 0.5$ A) / L level: ≤ 0.5 V ($I_L = 0$ A)
Output current per output	Max. 0.5 A, can be connected in parallel
Total current for whole module	Max. 2 A
Switching frequency	200 Hz with ohmic load / 2 Hz with inductive load / 1 Hz with lamp load
Simultaneity	100%
Free-wheeling diode	Integrated
Isolation	Each channel individually isolated from internal bus by optocouplers
Signal delay	< 100 μ s (with ohmic load)

For general technical data see next page