

Communication

	RPi4	RPi3
Ethernet	1 × 1Gbit Ethernet	1 × 300Mbps Ethernet
Serial/bus channels	1 × RS485, 1 × 1-Wire	
RS485 transmission speed	134 baud - 115,200 baud	
RS485 galvanic isolation	Yes	
RS485 biasing resistors	Yes, 560 Ω	
RS485 terminating resistor	Builtin attachable, 120 Ω	
1-Wire galvanic isolation	Yes	
1-Wire output voltage Vcc	5 V	
1-Wire max. current Vcc	50 mA	
1-Wire connector	3 × pole, max. 1.5 mm²	
WiFi	IEEE 802.11b/g/n	
Bluetooth	5.0, Low Energy (BLE)	4.2, Low Energy (BLE)
WiFi/Bluetooth antenna	Internal	
USB	2× USB 2.0, 2× USB 3.0	4 × USB 2.0

Analog outputs

Nr. of outputs × groups	1 × 1
Common connector	AGND
Available functions	AO 0–10 V / 0–20 mA, Resistance measurement: 0–2 kΩ Pt/Ni1000)
Galvanic isolation	No
Max. voltage/current	10 V / 20 mA
Resolution	12 bits
Conversion speed	1 ms
Resistance measurement method	2wire

Digital inputs

Nr. of inputs × groups	4 × 5
Common connector	DIGND
Galvanic isolation	Yes
Functions of inputs	Counter (w/o memory), signalization, Direct Switch
Input voltage of log. 0	Max. 3 V ⁼⁼
Max. frequency of counter input signal	10 kHz
Input voltage of log. 1	Min. 7 V ⁼⁼
Max. input voltage	35 V ⁼⁼
Input resistance	6,200 Ω
Delay 0→1/1→0	20 μs / 60 μs

Power supply

Rated voltage - SELV	24 V ⁼⁼
Power consumption	Typ. 6 W / Max. 15 W
Reverse polarity protection	Yes

Dimensions and weight

Dimensions	141 × 90 × 55.5 mm (without DIN rail)
Weight	378 g

Installation and operating conditions

Connection	Pluggable terminal blocks
Installation	On 35mm DIN rail into distribution box (holder included)
Operating conditions	0°C - +55°C, relative humidity 10% - 95%, without aggressive substances, condensing vapour and fog
Storing conditions	-25°C - +70°C, relative humidity 10% - 95%, without aggressive substances, condensing vapour and fog
Degree of protection IP (IEC 529)	IP 20
Wire gauge	Max. 2.5 mm²

Analog inputs

Nr. of inputs × groups	1 × 1
Common connector	AGND
Available functions	0–10 V, 0–20 mA
Galvanic isolation	No
Resolution	12 bits
Conversion speed	10 μs
Input resistance	66 kΩ - U, 100 Ω - I
Resistance measurement method	—

Relay outputs

Nr.of outputs × groups	1 × 2, 2 × 6
Galvanic isolation	Yes
Type of contact	Normally open (SPST)
Switchable voltage	250 V _~ / 30 V ⁼⁼
Switchable current	5 A
Short time overvoltage	5 A
Current via common conn.	10 A
Time to switch on/off	10 ms
Mechanical lifetime	5,000,000 cycles
Electrical lifetime	100,000 cycles
Protection against shortage	No
Inductive load protection	Not included
Isolation voltage	4,000 V _~

Digital outputs

Nr.of outputs × groups	4 × 1
Common connector	DOGND
Galvanic isolation	No
Type of output	NPN transistor (open collector)
Optional functions	PWM
Switchable voltage	5–50 V ⁼⁼
Switchable current continual/pulse	750 mA / 1 A
Max. total current DO 1.1–1.4	1 A
PWM max. frequency	200 kHz
PWM max. resolution	16 bits

Directive compliance

EMC: 2014/30/EU	RoHS: 2015/863/EU
RED: 2014/53/EU	WEEE: 2012/19/EU

