Product data sheet Characteristics

TM4PDPS1

module network TM4 1 Profibus DP slave





Main

Product or component Profibus DP communication module type

Complementary

Range compatibility	Modicon M251 Modicon M241
Product compatibility	Modicon M241 logic controller Modicon M251 logic controller
Current consumption	290 mA at 5 V DC for communication bus
Power dissipation in W	1.5 W
Integrated connection type	Profibus DP: female SUB-D 9 connector
Transmission rate	1.5 Mbit/s for bus length of 200 m 500 kbit/s for bus length of 400 m 187.5 kbit/s for bus length of 1000 m 9.693.75 kbit/s for bus length of 1200 m 312 Mbit/s for bus length of 100 m
Communication port protocol	Profibus DP V0 Profibus DP V1
Insulation	Between bus and internal logic at 1000 V DC
Local signalling	1 LED (green/yellow) for power supply 1 LED (green/red) for communication
Electrical connection	Screw connector terminal for connecting the functional ground SUB-D 9 1 female connector for connecting Profibus
Marking	CE
Surge withstand	1 KV power lines (DC) common mode conforming to EN/IEC 61000-4-5 2 KV power lines (AC) common mode conforming to EN/IEC 61000-4-5 2 KV relay output common mode conforming to EN/IEC 61000-4-5 1 KV I/O common mode conforming to EN/IEC 61000-4-5 1 KV shielded cable common mode conforming to EN/IEC 61000-4-5 0.5 KV power lines (DC) differential mode conforming to EN/IEC 61000-4-5 1 KV power lines (AC) differential mode conforming to EN/IEC 61000-4-5 1 KV relay output differential mode conforming to EN/IEC 61000-4-5 0.5 kV I/O differential mode conforming to EN/IEC 61000-4-5
Mounting support	Top hat type TH35-15 rail conforming to IEC 60715 Top hat type TH35-7.5 rail conforming to IEC 60715 Plate or panel with fixing kit
Width	25 mm
Height	90 mm
Depth	90 mm
Net weight	0.1 kg

Environment

Environment	
Standards	EN/IEC 61131-2 UL 508 EIA-485
Product certifications	C-Tick CULus
Resistance to electrostatic discharge	8 KV in air conforming to EN/IEC 61000-4-2 4 KV on contact conforming to EN/IEC 61000-4-2 8 KV in air conforming to Marine specification (LR, ABS, DNV, GL) 6 kV on contact conforming to Marine specification (LR, ABS, DNV, GL)
Resistance to electromagnetic fields	10 V/M 80 MHz1 GHz conforming to EN/IEC 61000-4-3 3 V/M 1.4 GHz2 GHz conforming to EN/IEC 61000-4-3 1 V/m 22.7 GHz conforming to EN/IEC 61000-4-3
Resistance to fast transients	2 KV (power lines) conforming to EN/IEC 61000-4-4 2 KV (relay output) conforming to EN/IEC 61000-4-4 1.5 KV (I/O) conforming to EN/IEC 61000-4-4 1 KV (Ethernet line) conforming to EN/IEC 61000-4-4 1 kV (serial link) conforming to EN/IEC 61000-4-4
Resistance to conducted disturbances	10 V 0.1580 MHz conforming to EN/IEC 61000-4-6 3 V 0.180 MHz conforming to Marine specification (LR, ABS, DNV, GL) 10 V spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz) conforming to Marine specification (LR, ABS, DNV, GL)
Electromagnetic emission	Conducted emissions - test level: 79 dBμV/m QP/66 dBμV/m AV (power lines (AC)) at 0.150.5 MHz conforming to EN/IEC 55011 Conducted emissions - test level: 73 dBμV/m QP/60 dBμV/m AV (power lines (AC)) at 0.5300 MHz conforming to EN/IEC 55011 Conducted emissions - test level: 12069 dBμV/m QP (power lines) at 10 150 kHz conforming to EN/IEC 55011 Conducted emissions - test level: 63 dBμV/m QP (power lines) at 1.530 MHz conforming to EN/IEC 55011 Radiated emissions - test level: 40 dBμV/m QP class A at 30230 MHz conforming to EN/IEC 55011 Radiated emissions - test level: 6054 dBμV/m QP at 30100 MHz conforming to Marine specification (LR, ABS, DNV, GL) Radiated emissions - test level: 24 dBμV/m QP at 156165 MHz conforming to Marine specification (LR, ABS, DNV, GL) Conducted emissions - test level: 7963 dBμV/m QP (power lines) at 150 1500 kHz conforming to EN/IEC 55011 Radiated emissions - test level: 47 dBμV/m QP class A at 2301000 MHz conforming to EN/IEC 55011 Radiated emissions - test level: 8050 dμV/m QP at 15030000 kHz conforming to Marine specification (LR, ABS, DNV, GL) Radiated emissions - test level: 8050 dμV/m QP at 15030000 kHz conforming to Marine specification (LR, ABS, DNV, GL)
Ambient air temperature for operation	-1055 °C horizontal installation -1050 °C vertical installation
Ambient air temperature for storage	-2570 °C
Relative humidity	1095 %, without condensation (in operation) 1095 %, without condensation (in storage)
IP degree of protection	IP20 with protective cover in place
Pollution degree	2
Operating altitude	02000 m
Storage altitude	03000 m
Vibration resistance	1 mm at 513.2 Hz on symmetrical rail 3 gn at 8.7150 Hz on symmetrical rail 1 mm at 513.2 Hz on panel mounting 0.7 gn at 13.2100 Hz on panel mounting
Shock resistance	15 gn for 11 ms
Dealine Unite	
Packing Units	138 000 a
Package 1 Height	128.000 g
Package 1 Height	170.000 mm
Package 1 width	110.000 mm

54.000 mm

Package 1 Length

Offer Sustainability

Sustainable offer status	Green Premium product
	Green remain product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EPEU RoHS Declaration
Mercury free	Yes
RoHS exemption information	₫Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes