Product datasheet

Specifications

Green Premium™

network switch module, Modicon M241, 1 Profibus DP slave

TM4PDPS1

Main

Product Or Component Type	Profibus DP communication module

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 9.6...93.75 kbit/s for bus length of 1200 m 3...12 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 IEC 61000-4-5 2 kV power lines (AC) common mode conforming to IEC 61000-4-5 2 kV relay output common mode conforming to IEC 61000-4-5 1 kV I/O common mode conforming to IEC 61000-4-5 1 kV shielded cable common mode conforming to IEC 61000-4-5 0.5 kV power lines (DC) differential mode conforming to IEC 61000-4-5 1 kV power lines (AC) differential mode conforming to IEC 61000-4-5 1 kV relay output differential mode conforming to IEC 61000-4-5 0.5 kV I/O differential mode conforming to 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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Standards	IEC 61131-2 UL 508 EIA-485
Product Certifications	C-Tick cULus
Resistance To Electrostatic Discharge	8 kV in air conforming to IEC 61000-4-2 4 kV on contact conforming to 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 MHz...1 GHz conforming to IEC 61000-4-3 3 V/m 1.4 GHz...2 GHz conforming to IEC 61000-4-3 1 V/m 2...2.7 GHz conforming to IEC 61000-4-3
Resistance To Fast Transients	2 kV (power lines) conforming to IEC 61000-4-4 2 kV (relay output) conforming to IEC 61000-4-4 1.5 kV (I/O) conforming to IEC 61000-4-4 1 kV (Ethernet line) conforming to IEC 61000-4-4 1 kV (serial link) conforming to IEC 61000-4-4
Resistance To Conducted Disturbances	10 V 0.15...80 MHz conforming to IEC 61000-4-6 3 V 0.1...80 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 0.15…0.5 MHz conforming to IEC 55011 Conducted emissions - test level: 73 dBµV/m QP/60 dBµV/m AV (power lines (AC)) at 0.5…300 MHz conforming to IEC 55011 Conducted emissions - test level: 120...69 dBµV/m QP (power lines) at 10…150 kHz conforming to IEC 55011 Conducted emissions - test level: 63 dBµV/m QP (power lines) at 1.5…30 MHz conforming to IEC 55011 Radiated emissions - test level: 40 dBµV/m QP class A at 30…230 MHz conforming to IEC 55011 Radiated emissions - test level: 60...54 dBµV/m QP at 30…100 MHz conforming to Marine specification (LR, ABS, DNV, GL) Radiated emissions - test level: 24 dBµV/m QP at 156…165 MHz conforming to Marine specification (LR, ABS, DNV, GL) Conducted emissions - test level: 79...63 dBµV/m QP (power lines) at 150…1500 kHz conforming to IEC 55011 Radiated emissions - test level: 47 dBµV/m QP class A at 230…1000 MHz conforming to IEC 55011 Radiated emissions - test level: 80...50 dµV/m QP at 150…30000 kHz conforming to Marine specification (LR, ABS, DNV, GL) Radiated emissions - test level: 54 dBµV/m QP at 100…2000 MHz conforming to Marine specification (LR, ABS, DNV, GL)
Ambient Air Temperature For Operation	-10…55 °C horizontal installation -10…50 °C vertical installation
Ambient Air Temperature For Storage	-25…70 °C
Relative Humidity	10…95 %, without condensation (in operation) 10…95 %, without condensation (in storage)
Ip Degree Of Protection	IP20 with protective cover in place
Pollution Degree	2
Operating Altitude	0...2000 m
Storage Altitude	0…3000 m
Vibration Resistance	1 mm at 5…13.2 Hz on symmetrical rail 3 gn at 8.7…150 Hz on symmetrical rail 1 mm at 5…13.2 Hz on panel mounting 0.7 gn at 13.2…100 Hz on panel mounting
Shock Resistance	15 gn for 11 ms

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

Package 1 Height	17.0 cm
Package 1 Width	11.0 cm
Package 1 Length	5.4 cm
Package 1 Weight	210.0 g
Unit Type Of Package 2	S03
Number Of Units In Package 2	34
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	7.15 kg

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency RoHS/REACh

Well-being performance

Mercury Free	
Rohs Exemption Information	Yes
Pvc Free	

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information