

# Product data sheet

Specifications



## module network TM4 4 Ethernet switches

TM4ES4

**Product availability : Stock - Normally stocked in distribution facility**

**Price\* : 149.00 USD**

### Main

**Product or Component Type** Ethernet unmanaged switch

### Complementary

**Range Compatibility** Modicon M251  
Modicon M241

**Product compatibility** Modicon M241 logic controller  
Modicon M251 logic controller

**Current consumption** 360 mA 5 V DC communication bus

**Integrated connection type** Ethernet 4 RJ45

**Transmission rate** 10/100 Mbit/s

**Port Ethernet** 10BASE-T/100BASE-TX - 4 copper cable

**Web services** Web server

**Communication Service** Modbus TCP server  
Modbus TCP slave device  
FTP  
NGVL  
Monitoring  
IEC VAR ACCESS  
Programming  
SNMP  
Modbus TCP client  
Downloading  
Updating firmware  
Ethernet/IP slave device  
DHCP client

**Maximum number of connections** 8 Modbus server  
16 Ethernet/IP device

**Communication Port Protocol** Ethernet IP/Modbus TCP  
TCP (Transmission Control Protocol)  
UDP (User Datagram Protocol)  
SNMP

**Redundancy** No

**Local signalling** for PWR 1 LED (green)  
for Ethernet link 1 LED per channel (green/yellow)  
for Ethernet port activity 1 LED per channel (green)

**Electrical connection** RJ45 4 connectors for connecting Ethernet network  
Screw connector terminal for connecting the functional ground

**Marking** CE

**Surge withstand** 1 kV power lines (DC) common mode EN/IEC 61000-4-5  
2 kV power lines (AC) common mode EN/IEC 61000-4-5  
2 kV relay output common mode EN/IEC 61000-4-5  
1 kV I/O common mode EN/IEC 61000-4-5

\* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

1 kV shielded cable common mode EN/IEC 61000-4-5  
 0.5 kV power lines (DC) differential mode EN/IEC 61000-4-5  
 1 kV power lines (AC) differential mode EN/IEC 61000-4-5  
 1 kV relay output differential mode EN/IEC 61000-4-5  
 0.5 kV I/O differential mode EN/IEC 61000-4-5

<b>Mounting support</b>	Top hat type TH35-15 rail IEC 60715 Top hat type TH35-7.5 rail IEC 60715 plate or panel with fixing kit
<b>Width</b>	0.98 in (25 mm)
<b>Height</b>	3.54 in (90 mm)
<b>Depth</b>	3.54 in (90 mm)
<b>Net Weight</b>	0.28 lb(US) (0.125 kg)

## Environment

<b>Standards</b>	UL 508 EN/IEC 61131-2
<b>Product Certifications</b>	cULus C-tick
<b>Resistance to electrostatic discharge</b>	8 kV in air EN/IEC 61000-4-2 4 kV on contact EN/IEC 61000-4-2 8 kV in air Marine specification (LR, ABS, DNV, GL) 6 kV on contact Marine specification (LR, ABS, DNV, GL)
<b>Resistance to electromagnetic fields</b>	9.14 V/m (10 V/m) 80 MHz...1 GHz EN/IEC 61000-4-3 2.74 V/m (3 V/m) 1.4 GHz...2 GHz EN/IEC 61000-4-3 0.91 V/m (1 V/m) 2...2.7 GHz EN/IEC 61000-4-3
<b>Resistance to fast transients</b>	2 kV EN/IEC 61000-4-4 power lines) 2 kV EN/IEC 61000-4-4 relay output) 1.5 kV EN/IEC 61000-4-4 I/O) 1 kV EN/IEC 61000-4-4 Ethernet line) 1 kV EN/IEC 61000-4-4 serial link)
<b>Resistance to conducted disturbances</b>	10 V 0.15...80 MHz EN/IEC 61000-4-6 3 V 0.1...80 MHz 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) Marine specification (LR, ABS, DNV, GL)
<b>Electromagnetic emission</b>	Conducted emissions 79 dB $\mu$ V/m QP/66 dB $\mu$ V/m AV power lines (AC))0.15...0.5 MHz EN/IEC 55011 Conducted emissions 73 dB $\mu$ V/m QP/60 dB $\mu$ V/m AV power lines (AC))0.5...300 MHz EN/IEC 55011 Conducted emissions 120...69 dB $\mu$ V/m QP power lines)10...150 kHz EN/IEC 55011 Conducted emissions 63 dB $\mu$ V/m QP power lines)1.5...30 MHz EN/IEC 55011 Radiated emissions 40 dB $\mu$ V/m QP class A30...230 MHz EN/IEC 55011 Radiated emissions 60...54 dB $\mu$ V/m QP30...100 MHz Marine specification (LR, ABS, DNV, GL) Radiated emissions 24 dB $\mu$ V/m QP156...165 MHz Marine specification (LR, ABS, DNV, GL) Conducted emissions 79...63 dB $\mu$ V/m QP power lines)150...1500 kHz EN/IEC 55011 Radiated emissions 47 dB $\mu$ V/m QP class A230...1000 MHz EN/IEC 55011 Radiated emissions 80...50 dB $\mu$ V/m QP150...30000 kHz Marine specification (LR, ABS, DNV, GL) Radiated emissions 54 dB $\mu$ V/m QP100...2000 MHz Marine specification (LR, ABS, DNV, GL)
<b>Ambient Air Temperature for Operation</b>	14...131 °F (-10...55 °C) horizontal installation 14...122 °F (-10...50 °C) vertical installation
<b>Ambient Air Temperature for Storage</b>	-13...158 °F (-25...70 °C)
<b>Relative humidity</b>	10...95 %, without condensation in operation) 10...95 %, without condensation in storage)
<b>IP degree of protection</b>	IP20 with protective cover in place
<b>Pollution degree</b>	2
<b>Operating altitude</b>	0...6561.68 ft (0...2000 m)
<b>Storage altitude</b>	0.00...9842.52 ft (0...3000 m)
<b>Vibration resistance</b>	1 mm 5...13.2 Hz symmetrical rail 3 gn 8.7...150 Hz symmetrical rail 1 mm 5...13.2 Hz panel mounting 0.7 gn 13.2...100 Hz panel mounting
<b>Shock resistance</b>	15 gn 11 ms

## Ordering and shipping details

<b>Category</b>	22533-M2XX PLC & ACCESSORIES
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Discount Schedule	MSX
GTIN	3606480611216
Nbr. of units in pkg.	1
Package weight(Lbs)	7.41 oz (210.0 g)
Returnability	Yes
Country of origin	ID

## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.22 in (5.635 cm)
Package 1 width	4.54 in (11.532 cm)
Package 1 Length	6.71 in (17.033 cm)
Unit Type of Package 2	S03
Number of Units in Package 2	20
Package 2 Weight	11.11 lb(US) (5.04 kg)
Package 2 Height	11.81 in (30.0 cm)
Package 2 width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)

## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes