



# I/O distributed module OTB -Ethernet TCP/IP - 0..100 m

OTB1E0DM9LP

- ! Discontinued on: Nov 29, 2019
- ! To be end-of-service on: Nov 29, 2024

### Main

Range Of Product	Modicon OTB	
Product Or Component Type	I/O distributed module	
Integrated Connection Type	Ethernet TCP/IP RJ45, transmission mode: 1 twisted pair at 10/100 Mbit/s, web server transparent ready class A10	
Discrete Input Number	12 conforming to EN/IEC 61131 type 1	
Discrete Input Logic	Sink or source	
Discrete Input Current	5 mA for I0I1	
	5 mA for I6I7	
	7 mA for I2I5	
	7 mA for I8I11	
Discrete Output Number	2 solid state PNP for Q0Q1 output logic: source	
	6 relay for Q2Q7	
Discrete Output Current	2000 mA for relay	
	300 mA for solid state	

### Complementary

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Concept	Transparent Ready
Port Ethernet	10BASE-T/10BASE-TX
Bus Length	0100 m, copper
Number Of Devices Per Segment	0256
Communication Service	Modbus messaging
Web Services	No standard Web server
Discrete Input Voltage	24 V
Discrete Input Voltage Type	DC
Discrete Input Type	NPN or PNP
Input Voltage Limits	20.426.4 V
Electronic Filtering Time	0.035 ms for I0I1 at state 1 0.035 ms for I6I7 at state 1 0.04 ms for I2I5 at state 1 0.04 ms for I8I11 at state 1 0.045 ms for I0I1 at state 0 0.045 ms for I6I7 at state 0 0.15 ms for I2I5 at state 0 0.15 ms for I8I11 at state 0
Configurable Filtering Time	0 ms 3 ms 12 ms

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Input Impedance	3.4 kOhm for I2I5 3.4 kOhm for I8I11
	5.7 kOhm for I011 5.7 kOhm for I617
Discrete Output Voltage	24 V DC solid state output(s)
, ,	240 V AC relay output(s)
	30 V DC relay output(s)
Output Voltage Limits	20.428.8 V solid state
Maximum Output Current	360 mA, solid state
Maximum Current Per Output Common	8 A relay 0.72 A solid state
Current Consumption	30 mA at 5 V DC (at state 1) relay output 40 mA at 24 V DC (at state 1) relay output 5 mA at 5 V DC (at state 0) relay output
Output Overvoltage Protection	3840 V
Maximum Tungsten Load	<8 W for solid state
Response Time	300 μs at state 0 for relay
	300 μs at state 1 for relay 5 μs at state 0 for solid state
	5 µs at state 1 for solid state
Minimum Switchable Load	0.1 mA
Contact Bounce Time	<= 1 ms for relay
Maximum Leakage Current	0.1 mA at state 0 for solid state
Drop-Out Voltage	1 V at state 1
Insulation Between Channel And	1500 Vrms for 1 minute for relay output
Internal Logic	500 Vrms for 1 minute for input circuit 500 Vrms for 1 minute for solid state output
Insulation Between Channels	None
Contact Resistance	30 mOhm
Electrical Durability	500000 cycles AC-1 with 500 VA load for relay output
	500000 cycles AC-14 with 250 VA load for relay output
	500000 cycles AC-15 with 200 VA load for relay output
	500000 cycles DC-1 with 60 W load for relay output 500000 cycles DC-13 with 30 W load for relay output
Supply Circuit Type	DC
[Us] Rated Supply Voltage	24 V
Supply Voltage Limits	20.426.2 V
Input Current	700 mA at 26.2 V for supply circuit
Inrush Current	1 A for solid state output 50 A for supply circuit
Power Consumption In W	19 W
Maximum Number Of I/O Expansion Module	7
I/O Expansion Capacity	132 with screw terminal discrete I/O module(s)
	188 with spring terminal discrete I/O module(s)
	244 with HE10 connector discrete I/O module(s) 7 x 8I or 7 x 2I or 7 x (4I/2O) with screw terminal analogue I/O module(s)
Insulation Resistance	>= 10 MOhm between I/O and earth terminals >= 10 MOhm between power supply and earth
I/O Connection	Removable screw terminal block

Number Of Common Point	1 for relay output (1 NO) 1 for relay output (2 NO) 1 for relay output (3 NO) 1 for input 1 for solid state output
Counting Input Number	2
Counting Capacity	32 bits
Counting Frequency	5000 Hz 20000 Hz
Pulse Generator Number	2
Pulse Generator Frequency	7 kHz
Pulse Generator Function	RPLS pulse generator output RPWM pulse width modulation
Marking	CE
Fixing Mode	By clips (35 mm symmetrical DIN rail) By screws (panel with fixing kit) By screws (solid plate with fixing kit)
Status Led	1 LED per channel (green) I/O 1 LED (green) 10T 1 LED (green) PWR 1 LED (yellow) 100T 1 LED (yellow) STAT
Net Weight	0.185 kg

## **Environment**

Ip Degree Of Protection	IP20	
Immunity To Microbreaks	10 ms for supply circuit	
Dielectric Strength	500 V between I/O and earth terminals 500 V between power supply and earth	
Standards	CSA CSA C22.2 No 213 Class I Division 2 Group B CSA C22.2 No 213 Class I Division 2 Group A UL 508 CSA C22.2 No 213 Class I Division 2 Group C EN 61131-2 CSA C22.2 No 213 Class I Division 2 Group D IEC 61131-2	
Product Certifications	cULus	
Ambient Air Temperature For Operation	055 °C	
Ambient Air Temperature For Storage	-2570 °C	
Relative Humidity	3095 % without condensation	
Pollution Degree	2 conforming to EN 60664 2 conforming to IEC 60664	
Operating Altitude	02000 m	
Storage Altitude	03000 m	
Vibration Resistance	0.075 mm at 1057 Hz on 35 mm symmetrical DIN rail 1 gn at 57150 Hz on 35 mm symmetrical DIN rail	
Shock Resistance	15 gn for 11 ms conforming to EN 61131 15 gn for 11 ms conforming to IEC 61131	
Resistance To Electrostatic Discharge	4 kV in contact conforming to IEC 61000-4-2 8 kV in air conforming to EN 61000-4-2 8 kV in air conforming to IEC 61000-4-2 4 kV in contact conforming to EN 61000-4-2	

10 V/m, radio frequency fields = 800000002000000000 Hz conforming to EN 61000-4-3 10 V/m, radio frequency fields = 800000002000000000 Hz conforming to IEC 61000-4-3
1 kV (24 V solid state I/O) conforming to IEC 61000-4-4 2 kV (24 V supply) conforming to IEC 61000-4-4

## **Packing Units**

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Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	7.5 cm
Package 1 Width	10.5 cm
Package 1 Length	12.5 cm
Package 1 Weight	312.0 g
Unit Type Of Package 2	S03
Number Of Units In Package 2	18
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	6.016 kg

# **Contractual warranty**

Warranty 18 months

## **Sustainability**

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> 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 >

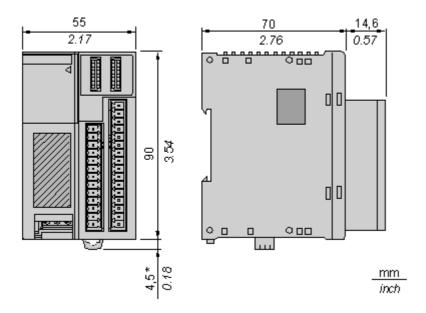
## Well-being performance

Mercury Free	
Rohs Exemption Information	Yes
Pvc Free	
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
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 www.P65Warnings.ca.gov

**Dimensions Drawings** 

### **Network Interface Module**

#### **Dimensions**

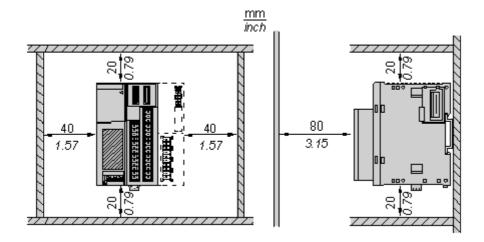


NOTE: \* 8.5 mm (0.33 in) when the clamp is pulled out.

Mounting and Clearance

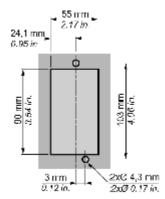
#### Mounting an Island on a Panel or in a Cabinet

#### **Spacing Requirements**



#### **Panel Mounting**

Position of the Mounting Holes for the Network Interface Module



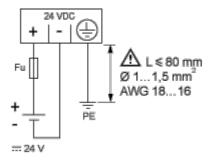
## **Product data sheet**

# OTB1E0DM9LP

Connections and Schema

## 24 Vdc Power Supply

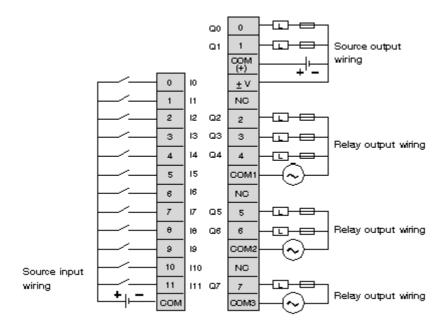
#### Wiring Diagram



Fu 2 A fast-blow fuse ABE7FU200

#### **Network Interface Module**

#### Wiring Diagram



- Output points 0 and 1 are source transistor outputs, all other output points are relay.
- The COM terminals are **not** connected together internally.
- Connect an appropriate fuse for the load.