



# Product datasheet

Specifications



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

OTB1E0DM9LP

-  **Discontinued on:** 6 Mar 2023
-  **To be end-of-service on:** 31 Dec 2027

 **Discontinued - Service only**

### 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 I0...I1 5 mA for I6...I7 7 mA for I2...I5 7 mA for I8...I11
Discrete Output Number	2 solid state PNP for Q0...Q1 output logic: source 6 relay for Q2...Q7
Discrete Output Current	2000 mA for relay 300 mA for solid state

### Complementary

Concept	Transparent Ready
Port Ethernet	10BASE-T/10BASE-TX
Bus Length	0...100 m, copper
Number Of Devices Per Segment	0...256
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	20.4...26.4 V
Electronic Filtering Time	0.035 ms for I0...I1 at state 1 0.035 ms for I6...I7 at state 1 0.04 ms for I2...I5 at state 1 0.04 ms for I8...I11 at state 1 0.045 ms for I0...I1 at state 0 0.045 ms for I6...I7 at state 0 0.15 ms for I2...I5 at state 0 0.15 ms for I8...I11 at state 0
Configurable Filtering Time	0 ms 3 ms 12 ms

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

<b>Input Impedance</b>	3.4 kOhm for I2...I5 3.4 kOhm for I8...I11 5.7 kOhm for I0...I1 5.7 kOhm for I6...I7
<b>Discrete Output Voltage</b>	24 V DC solid state output(s) 240 V AC relay output(s) 30 V DC relay output(s)
<b>Output Voltage Limits</b>	20.4...28.8 V solid state
<b>Maximum Output Current</b>	360 mA, solid state
<b>Maximum Current Per Output Common</b>	8 A relay 0.72 A solid state
<b>Current Consumption</b>	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
<b>Output Overvoltage Protection</b>	38...40 V
<b>Maximum Tungsten Load</b>	<8 W for solid state
<b>Response Time</b>	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
<b>Minimum Switchable Load</b>	0.1 mA
<b>Contact Bounce Time</b>	<= 1 ms for relay
<b>Maximum Leakage Current</b>	0.1 mA at state 0 for solid state
<b>Drop-Out Voltage</b>	1 V at state 1
<b>Insulation Between Channel And Internal Logic</b>	1500 Vrms for 1 minute for relay output 500 Vrms for 1 minute for input circuit 500 Vrms for 1 minute for solid state output
<b>Insulation Between Channels</b>	None
<b>Contact Resistance</b>	30 mOhm
<b>Electrical Durability</b>	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
<b>Supply Circuit Type</b>	DC
<b>[Us] Rated Supply Voltage</b>	24 V
<b>Supply Voltage Limits</b>	20.4...26.2 V
<b>Input Current</b>	700 mA at 26.2 V for supply circuit
<b>Inrush Current</b>	1 A for solid state output 50 A for supply circuit
<b>Power Consumption In W</b>	19 W
<b>Maximum Number Of I/O Expansion Module</b>	7
<b>I/O Expansion Capacity</b>	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)
<b>Insulation Resistance</b>	>= 10 MOhm between I/O and earth terminals >= 10 MOhm between power supply and earth
<b>I/O Connection</b>	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	0...55 °C
Ambient Air Temperature For Storage	-25...70 °C
Relative Humidity	30...95 % without condensation
Pollution Degree	2 conforming to EN 60664 2 conforming to IEC 60664
Operating Altitude	0...2000 m
Storage Altitude	0...3000 m
Vibration Resistance	0.075 mm at 10...57 Hz on 35 mm symmetrical DIN rail 1 gn at 57...150 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

Resistance To Radiated Fields	10 V/m, radio frequency fields = 80000000...2000000000 Hz conforming to EN 61000-4-3 10 V/m, radio frequency fields = 80000000...2000000000 Hz conforming to IEC 61000-4-3
Resistance To Fast Transients	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

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	12 months
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## 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<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.

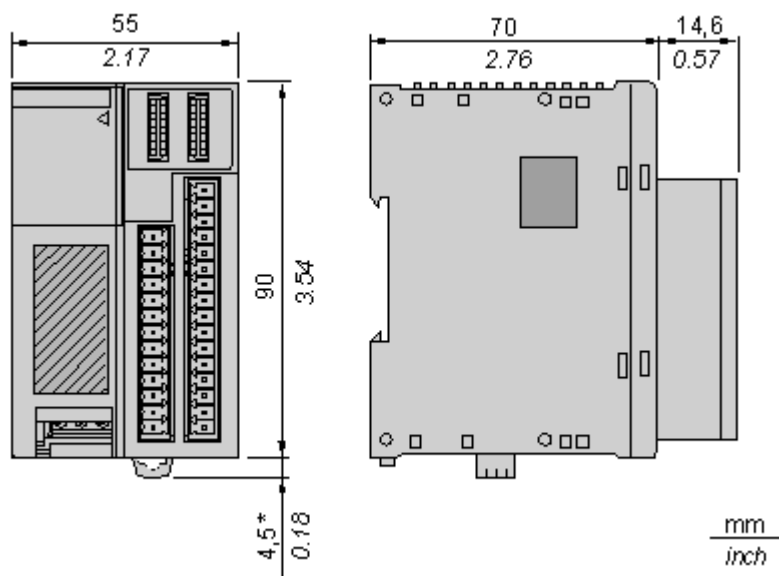
[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)

## Well-being performance

✓	Mercury Free	
✓	Rohs Exemption Information	Yes
✓	Pvc Free	
Reach Regulation		<a href="#">REACH Declaration</a>
Eu Rohs Directive		Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation		<a href="#">China RoHS declaration</a>
Weee		The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions

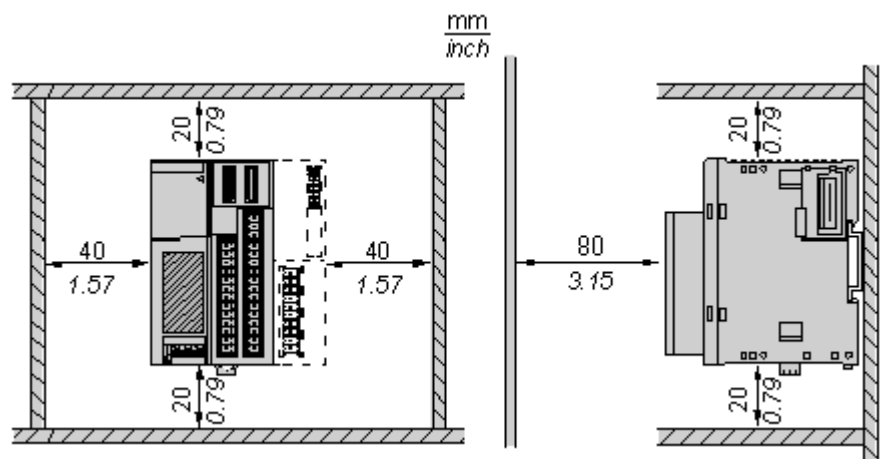


NOTE: \* 8.5 mm (0.33 in) when the clamp is pulled out.

Mounting and Clearance

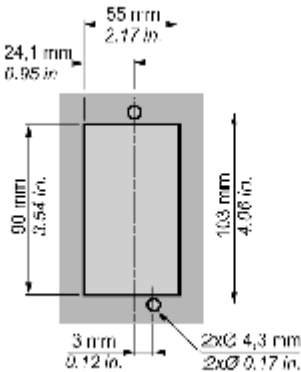
Mounting an Island on a Panel or in a Cabinet

Spacing Requirements



Panel Mounting

Position of the Mounting Holes for the Network Interface Module

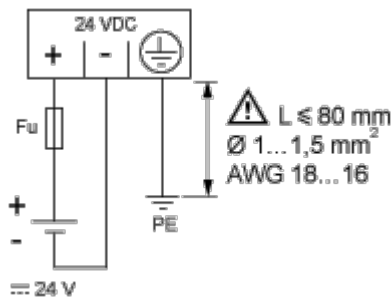




Connections and Schema

24 Vdc Power Supply

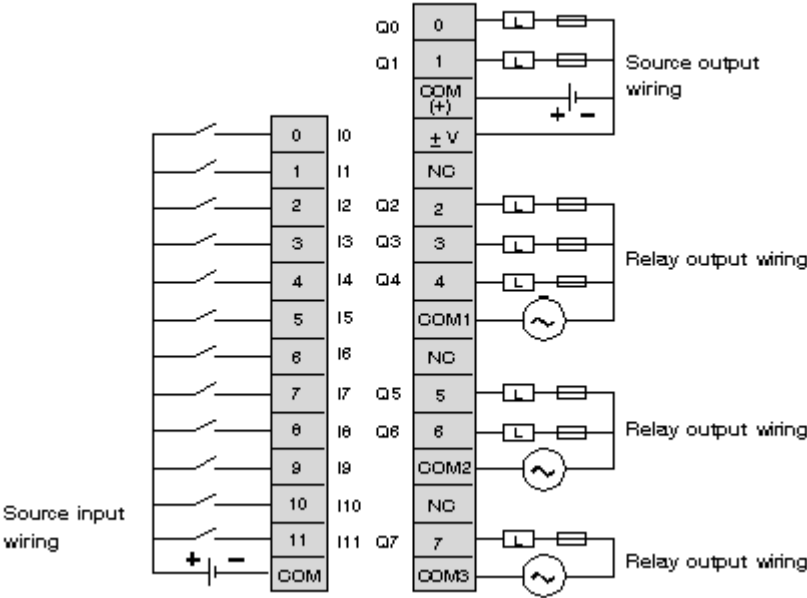
Wiring Diagram



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.