Product data sheet

Specifications



logic controller, Modicon M258, compact base, 42 IO, 24V DC, CANopen

TM258LF42DT

To be discontinued

Discontinued on: Jun 30, 2026

To be end-of-service on: Jun 30, 2031

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Modicon M258
Product or Component Type	Logic controller
Product Specific Application	-
Discrete I/O number	42
Discrete output number	12 output 4 fast output

Complementary

Discrete input number	10 fast input 12 input 4 regular input
Discrete input logic	Sink fast input Sink regular input Source input
Discrete input voltage	24 V
Discrete input voltage type	DC
Voltage state 1 guaranteed	>= 15 V fast input >= 15 V fast output >= 15 V regular input
Voltage state 0 guaranteed	<= 5 V fast input <= 5 V fast output <= 5 V regular input
Discrete input current	4 mA fast input 4 mA regular input
Input impedance	6 kOhm fast input 6 kOhm regular input
Configurable filtering time	0 ms fast input/regular input and fast output 1.5 ms fast input/regular input and fast output 12 ms fast input/regular input and fast output 4 ms fast input/regular input and fast output
Anti bounce filtering	2 µs...4 ms configurable fast input/regular input and fast output
Maximum cable distance between devices	<98.4 ft (30 m) fast input <98.4 ft (30 m) fast output <98.4 ft (30 m) regular input
Isolation between channels and internal logic	500 Vrms AC
Isolation between channels	None

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

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

Discrete output logic	Source
Discrete output voltage	24 V DC
Output voltage limits	19.2...28.8 V
Discrete output current	4 mA fast output
[Us] rated supply voltage	24 V DC embedded expert modules power 24 V DC I/O power segment 24 V DC main supply
Supply voltage limits	20.4…28.8 V
Line Rated Current	0.04 A embedded expert modules power 10 A I/O power segment 0.26 A main supply
Peak current	100 kA <= 70 s)main supply 25 kA <= 500 s)I/O power segment 50 kA <= 150 s)embedded expert modules power 1.2 A > 70 s)main supply
Power Consumption in W	13.03 W
Memory description	Flash 128 MB Internal RAM 64 MB
Realtime clock	Without any user calibration clock, clock drift < 30 s/month at 77 °F (25 °C) With user calibration clock, clock drift <= 6 s/month
Data backed up	Variables of type retain and retain persistent CR2477M Renata, 1.5 years
Integrated connection type	1 isolated serial link female RJ45 Modbus master/slave RTU/ASCII or character mode ASCII RS232/RS485 300...115200 bps 1 isolated serial link female RJ45 Ethernet Modbus TCP/IP slave 10BASE-T/100BASE-TX 1 isolated serial link mini B USB 480 Mbit/s 1 isolated serial link USB type A 480 Mbit/s 1 CANopen male SUB-D 9 CANopen master
Transmission rate	125 kbit/s 1640.4 ft (500 m) CANopen 250 kbit/s 820.2 ft (250 m) CANopen 50 kbit/s 3280.8 ft (1000 m) CANopen 500 kbit/s 328.08 ft (100 m) CANopen 10 kbit/s 16404.2 ft (5000 m) CANopen 1000 kbit/s 13.1 ft (4 m) CANopen 20 kbit/s 8202.10 ft (2500 m) CANopen 800 kbit/s 82.02 ft (25 m) CANopen
Counting input number	8 200 kHz
Local signalling	1 LED per channel I/O state 1 LED CAN0 STS 1 LED MBS COM 1 LED green/red APP0 1 LED green/red APP1 1 LED green/red Eth NS (Ethernet network status) 1 LED green/red Eth ST (Ethernet status) 1 LED green/red RUN/MS (module status) 1 LED green/red USB host 1 LED green/yellow Eth LA (Ethernet activity) 1 LED red BATT (battery status)
Marking	CE
Mounting Support	Symmetrical DIN rail
Width	6.9 in (175 mm)
Height	3.9 in (99 mm)
Depth	3.3 in (85 mm)
Net Weight	1.21 lb(US) (0.55 kg)

Environment

Standards	UL 508 CSA C22.2 No 142 IEC 61131-2 CSA C22.2 No 213
Product Certifications	GOST-R cULus C-tick CSA
Ambient air temperature for operation	32…131 °F (0…55 °C) without derating horizontal installation) 32…140 °F (0…60 °C) with derating factor horizontal installation) 32…122 °F (0…50 °C) vertical installation)
Ambient Air Temperature for Storage	-13…158 °F (-25…70 °C)
Relative humidity	5…95 % without condensation
IP degree of protection	IP20IEC 61131-2
Pollution degree	2 IEC 60664
Operating altitude	0...6561.68 ft (0...2000 m)
Storage altitude	0…9842.5 ft (0…3000 m)
Vibration resistance	1 gn 8.4…150 Hz DIN rail 3.5 mm 5…8.4 Hz DIN rail
Shock resistance	15 gn 11 ms
Resistance to electrostatic discharge	4 kV on contact IEC 61000-4-2 8 kV in air IEC 61000-4-2
Resistance to electromagnetic fields	0.9 V/m (1 V/m) 2...2.7 GHz IEC 61000-4-3 9.1 V/m (10 V/m) 80...2000 MHz IEC 61000-4-3
Resistance to fast transients	1 kV IEC 61000-4-4 I/O) 1 kV IEC 61000-4-4 shielded cable) 2 kV IEC 61000-4-4 power lines)
Surge withstand	0.5 kV differential mode IEC 61000-4-5 1 kV common mode IEC 61000-4-5
Disturbance radiated/conducted	CISPR 11

Ordering and shipping details

Category	US1PC1222532
Discount Schedule	PC12
GTIN	3595864074313
Returnability	Yes
Country of origin	AT

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	5.276 in (13.400 cm)
Package 1 Width	6.299 in (16.000 cm)
Package 1 Length	12.402 in (31.500 cm)
Package weight(Lbs)	27.549 oz (781.000 g)
Unit Type of Package 2	S04
Number of Units in Package 2	6
Package 2 Height	11.811 in (30.000 cm)

Package 2 Width	15.748 in (40.000 cm)
Package 2 Length	23.622 in (60.000 cm)
Package 2 Weight	12.286 lb(US) (5.573 kg)

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Use Better

Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Free of Substances of Very High Concern above the threshold
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
PVC free	Yes

Use Again

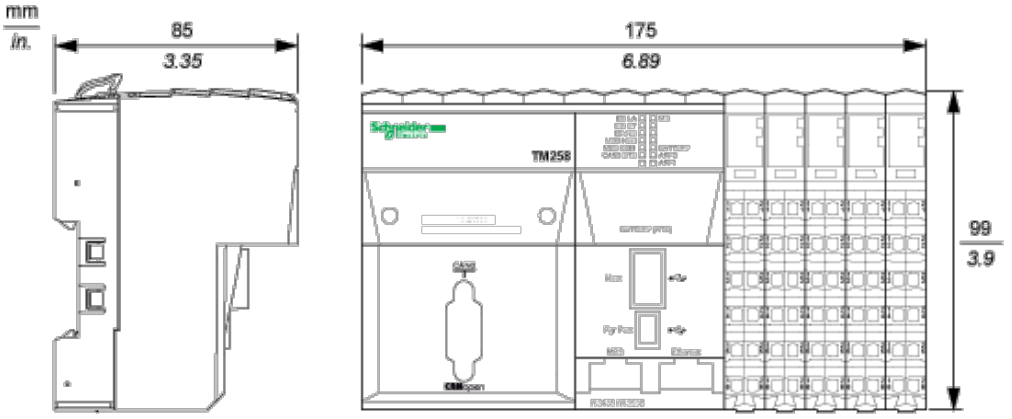
Repack and remanufacture

Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Dimensions Drawings

Controller

Dimensions



Connections and Schema

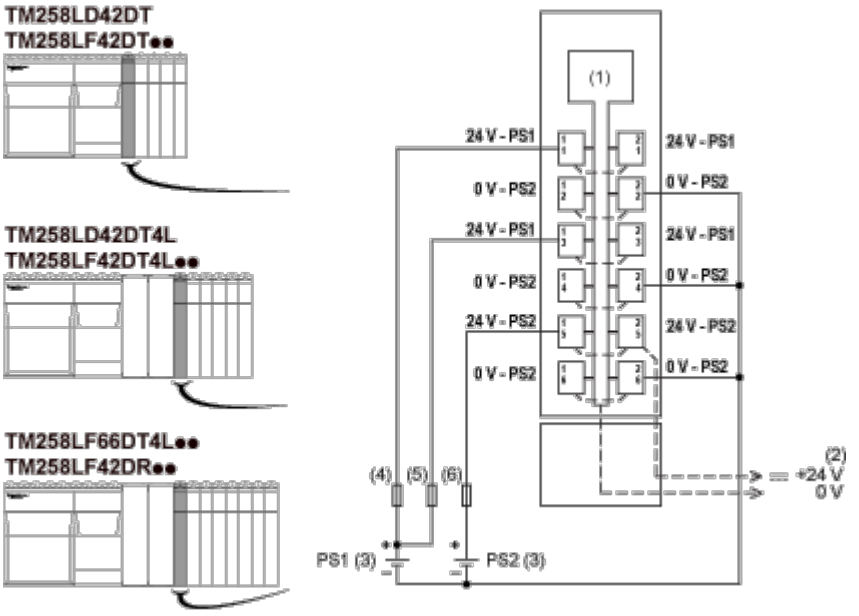
TM5 System Wiring Recommendations

Wire Sizes to Use with Removable Spring Terminal Blocks

mm / in.				
mm²	0,08...2,5	0,25...2,5	0,25...1,5	2 x 0,25...2 x 0,75
AWG	28...14	24...14	24...16	2 x 24...2 x 18

External Power Supplies

Wiring Diagram of the Controller Power Distribution Module



(1) Internal electronics

(2) 24 Vdc I/O power segment integrated into the bus bases

(3) PS1/PS2: External isolated SELV power supply 24 Vdc

(4) External fuse, Type T slow-blow, 3 A 250 V

(5) External fuse, Type T slow-blow, 2 A 250 V

(6) External fuse, Type T slow-blow, 10 A max., 250 V