Product data sheet
Characteristics

TM258LF42DT
logic controller, Modicon M258, compact base, 42 IO, 24V DC, CANopen



Commercial status
End of Commercialisation : JUN 30, 2026

⚠ End of Commercialisation

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 for fast input 12 for input 4 for regular input
Discrete input logic	Sink for fast input Sink for regular input Source for input
Discrete input voltage	24 V
Discrete input voltage type	DC
Voltage state 1 guaranteed	>= 15 V for fast input >= 15 V for fast output >= 15 V for regular input
Voltage state 0 guaranteed	<= 5 V for fast input <= 5 V for fast output <= 5 V for regular input
Discrete input current	4 MA for fast input 4 MA for regular input
Input impedance	6 kOhm for fast input 6 kOhm for regular input
Configurable filtering time	0 ms for fast input/regular input and fast output 1.5 ms for fast input/regular input and fast output 12 ms for fast input/regular input and fast output 4 ms for 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	<30 M for fast input <30 M for fast output <30 M for regular input
Isolation between channels and internal logic	500 Vrms AC
Isolation between channels	None
Discrete output logic	Source
Discrete output voltage	24 V DC
Output voltage limits	19.2...28.8 V
Discrete output current	4 mA for fast output

[Us] rated supply voltage	24 V DC for embedded expert modules power 24 V DC for I/O power segment 24 V DC for main supply
Supply voltage limits	20.4…28.8 V
[In] rated current	0.04 A for embedded expert modules power 10 A for I/O power segment 0.26 A for main supply
Peak current	100 KA (duration = <= 70 s) for main supply 25 KA (duration = <= 500 s) for I/O power segment 50 KA (duration = <= 150 s) for embedded expert modules power 1.2 A (duration = > 70 s) for 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 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 autonomy
Integrated connection type	1 isolated serial link with female RJ45 connectorModbus with master/slave RTU/ASCII or characte 1 isolated serial link with female RJ45 connectorEthernet Modbus TCP/IP with slave, physical inte 1 isolated serial link with mini B USB connector, transmission rate: 480 Mbit/s 1 isolated serial link with USB type A connector, transmission rate: 480 Mbit/s 1 CANopen with male SUB-D 9 connectorCANopen with master
Transmission rate	125 kbit/s for bus length of 500 m for CANopen 250 kbit/s for bus length of 250 m for CANopen 50 kbit/s for bus length of 1000 m for CANopen 500 kbit/s for bus length of 100 m for CANopen 10 kbit/s for bus length of 5000 m for CANopen 1000 kbit/s for bus length of 4 m for CANopen 20 kbit/s for bus length of 2500 m for CANopen 800 kbit/s for bus length of 25 m for CANopen
Counting input number	8 counting input(s) at 200 kHz
Local signalling	1 LED per channel for I/O state 1 LED for CAN0 STS 1 LED for MBS COM 1 LED green/red for APP0 1 LED green/red for APP1 1 LED green/red for Eth NS (Ethernet network status) 1 LED green/red for Eth ST (Ethernet status) 1 LED green/red for RUN/MS (module status) 1 LED green/red for USB host 1 LED green/yellow for Eth LA (Ethernet activity) 1 LED red for BATT (battery status)
Marking	CE
Mounting support	Symmetrical DIN rail
Width	175 Mm
Height	99 Mm
Depth	85 Mm
Net weight	0.55 Kg

Environment

Standards	UL 508 CSA C22.2 No 142 IEC 61131-2 CSA C22.2 No 213
Product certifications	GOST-R[RETURN]cULus[RETURN]C-Tick[RETURN]CSA
Ambient air temperature for operation	0…55 °C without derating (horizontal installation) 0…60 °C with derating factor (horizontal installation) 0…50 °C (vertical installation)
Ambient air temperature for storage	-25…70 °C
Relative humidity	5…95 % without condensation
IP degree of protection	IP20 conforming to IEC 61131-2
Pollution degree	2 conforming to IEC 60664
Operating altitude	0...2000 m
Storage altitude	0…3000 M
Vibration resistance	1 gn at 8.4…150 Hz on DIN rail 3.5 mm at 5…8.4 Hz on DIN rail
Shock resistance	15 gn for 11 ms

Resistance to electrostatic discharge	4 KV on contact conforming to IEC 61000-4-2 8 KV in air conforming to IEC 61000-4-2
Resistance to electromagnetic fields	1 V/M 2...2.7 GHz conforming to IEC 61000-4-3 10 V/M 80...2000 MHz conforming to IEC 61000-4-3
Resistance to fast transients	1 KV (I/O) conforming to IEC 61000-4-4 1 KV (shielded cable) conforming to IEC 61000-4-4 2 KV (power lines) conforming to IEC 61000-4-4
Surge withstand	0.5 KV differential mode conforming to IEC 61000-4-5 1 KV common mode conforming to IEC 61000-4-5
Disturbance radiated/conducted	CISPR 11

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	13.400 Cm
Package 1 Width	16.000 Cm
Package 1 Length	31.500 Cm
Package 1 Weight	781.000 G
Unit Type of Package 2	S04
Number of Units in Package 2	6
Package 2 Height	30.000 Cm
Package 2 Width	40.000 Cm
Package 2 Length	60.000 Cm
Package 2 Weight	5.573 Kg

Offer Sustainability

REACh free of SVHC	Yes
Toxic heavy metal free	Yes
Mercury free	Yes
Sustainable packaging	No
Packaging made with recycled cardboard	No
Packaging without single use plastic	Yes
REACh Regulation	Free of Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
PVC free	Yes
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection a

Contractual warranty

Warranty (in months)	18

Product Life Status : Post commercialisation

TM258LF42DT is replaced by the following product range:



65771

IIoT-ready logic & motion controller for performance machines

Substitution date: |