## Product data sheet

Specifications



# logic controller, Modicon M258, compact base, 66 + 4 IO, 24V DC

TM258LF66DT4L

#### Main

Range Of Product	Modicon M258		
Product Or Component Type	Logic controller		
Product Specific Application	-		
Discrete I/O Number	66		
Analogue Input Number	4		
Discrete Output Number	24 output 4 fast output		

## Complementary

Discrete Input Number	10 for fast input 4 for regular input 24 for 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			
Analogue Input Type	Current: 020 mA Current: 420 mA Voltage: +/- 10 V			
Analogue Input Resolution	12 bits			
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	$2\mu\text{s}4$ 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	500 Vrms AC			

Isolation Between Channels And 500<sup>+</sup> Internal Logic

Isolation Between Channels	Nana			
	None			
Discrete Output Logic	Source			
Discrete Output Voltage	24 V DC			
Output Voltage Limits	19.228.8 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	20.428.8 V			
[In] Rated Current	0.04 A for embedded expert modules power 10 A for I/O power segment 0.31 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 kA (duration = > 70 s) for main supply			
Power Consumption In W	18.11 W			
Memory Description	Flash 128 MB Internal RAM 64 MB			
Realtime Clock	Without any user calibration clock, clock drift < 30 s/month at 25 $^\circ C$ 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 character mode ASCII, physical interface: RS232/RS485, transmission rate: 300115200 bps 1 isolated serial link with female RJ45 connectorEthernet Modbus TCP/IP with slave, physical interface: 10BASE-T/100BASE-TX 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 2 free slots PCI 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	262.5 mm			
Height	99 mm			
Depth	85 mm			
Net Weight	0.8 kg			

## Environment

Standards	UL 508 CSA C22.2 No 142 CSA C22.2 No 213 IEC 61131-2				
Product Certifications	CSA cULus GOST-R C-Tick				
Ambient Air Temperature For Operation	055 °C without derating (horizontal installation) 060 °C with derating factor (horizontal installation) 050 °C (vertical installation)				
Ambient Air Temperature For Storage	-2570 °C				
Relative Humidity	595 % without condensation				
Ip Degree Of Protection	IP20 conforming to IEC 61131-2				
Pollution Degree	2 conforming to IEC 60664				
Operating Altitude	02000 m				
Storage Altitude	03000 m				
Vibration Resistance	1 gn at 8.4150 Hz on DIN rail 3.5 mm at 58.4 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 22.7 GHz conforming to IEC 61000-4-3 10 V/m 802000 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	13.600 cm
Package 1 Width	15.500 cm
Package 1 Length	37.500 cm
Package 1 Weight	1.019 kg
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	7.050 kg

## **Contractual warranty**

Warranty

### **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

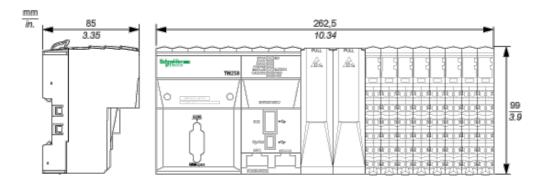
California Proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov		
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins		
China Rohs Regulation	China RoHS declaration		
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)		
Reach Regulation	REACh Declaration		
Vvc Free			
Rohs Exemption Information	Yes		
Mercury Free			
Toxic Heavy Metal Free			

## Product data sheet

**Dimensions Drawings** 

#### Controller

#### Dimensions



## Product data sheet

Connections and Schema

#### TM5 System Wiring Recommendations

#### Wire Sizes to Use with Removable Spring Terminal Blocks

<u>mm</u> 83 <i>In</i> . C	5		0		80
	mm²	0,082,5	0,252,5	0,251,5	2 x 0,252 x 0,75
	AWG	2814	24 14	2416	2 x 24 2 x 18

#### **External Power Supplies**

#### TM258LD42DT TM258LF42DTee (1) 24 V - PS1 24 V - PS1 0 V - PS2 0 V - PS2 TM258LD42DT4L 24 V - PS1 24 V - PS1 TM258LF42DT4Lee 0 V - PS2 2 0 V - PS2 24 V - PS2 24 V - PS2 0 V - PS2 1 0 V - PS2 TM258LF66DT4Lee (2) → = +24 V 0 V TM258LF42DRee (4) (5) (6) \_\_\_ \_\_\_\_ PS1 (3) PS2 (3)

#### 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