

Product data sheet

Specifications



Unity processor - 8 racks (12 slots)/ 16 racks (4/6/8 slots) - 1680 mA 5 V DC

TSXP57454MC

⚠ Discontinued on: Jan 26, 2021

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Main

Range of product	Modicon Premium Automation platform
Product or component type	Unity processor
Software designation	Unity Pro

Complementary

Number of racks	16 4/6/8 slots 8 12 slots
Number of slots	64 128 96
Discrete I/O processor capacity	2040 I/O
Analogue I/O processor capacity	256 I/O
Number of application specific channel	64
Number of process control channel	20 up to 60 simple loops
Integrated connection type	Non isolated serial link female mini DIN RS485)19.2 kbit/s) Fipio manager (127 agents) SUB-D 9 USB port12 Mbit/s)
Communication module processor capacity	4 1 8
Memory description	Internal RAM (with PCMCIA card) 2048 kB program Internal RAM (with PCMCIA card) 440 kB data Internal RAM (without PCMCIA card) 440 kB program and data PCMCIA card 16384 kB additional data storage
Maximum size of object areas	32768 %Mi located internal bits 64 %KWi constant words located internal data 64 %MWi internal words located internal data Unlimited (DFB and EFB function blocks) unlocated internal data Unlimited (elementary and derived data) unlocated internal data
Application structure	64 event tasks 1 fast task 1 master task
Execution time per instruction	0.039...0.057 μs Boolean without PCMCIA card 0.048...0.057 μs Boolean with PCMCIA card 0.054...0.073 μs word or fixed-point arithmetic with PCMCIA card 0.054...0.073 μs word or fixed-point arithmetic without PCMCIA card 0.55...0.63 μs floating points with PCMCIA card 0.55...0.63 μs floating points without PCMCIA card
Number of instructions per ms	11.4 Kinst/ms 65 % Boolean + 35 % fixed arithmetic with PCMCIA card 11.4 Kinst/ms 65 % Boolean + 35 % fixed arithmetic without PCMCIA card 15.75 Kinst/ms 100 % Boolean with PCMCIA card 15.75 Kinst/ms 100 % Boolean without PCMCIA card

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

System overhead	0.08 ms fast task 1 ms master task
Marking	CE
Local signalling	1 LED (green) for processor running (RUN) 1 LED (red) for activity on Fipio bus (FIP) 1 LED (red) for I/O module or configuration fault (I/O) 1 LED (red) for processor or system fault (ERR) 1 LED (yellow) for activity on TER or AUX terminal port (TER)
Current consumption	1680 mA 5 V DC
Module format	Double
Net weight	1.23 lb(US) (0.56 kg)

Environment

Standards	CSA C22.2 No 213 Class I Division 2 Group C 89/336/EEC 92/31/EEC 93/68/EEC 73/23/EEC UL 508 CSA C22.2 No 142 CSA C22.2 No 213 Class I Division 2 Group D IEC 61131-2 CSA C22.2 No 213 Class I Division 2 Group B CSA C22.2 No 213 Class I Division 2 Group A
Product certifications	RINA BV LR ABS DNV RMRS GL
Ambient air temperature for operation	32...140 °F (0...60 °C)
Ambient air temperature for storage	-13...158 °F (-25...70 °C)
Relative humidity	10...95 % without condensation for operation 5...95 % without condensation for storage
Operating altitude	0...2000 m
Protective treatment	TC Conformal coating Humiseal 1A33
IP degree of protection	IP20
Pollution degree	2

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.7 in (9.5 cm)
Package 1 Width	7.09 in (18.0 cm)
Package 1 Length	10.2 in (26.0 cm)
Package 1 Weight	2.247 lb(US) (1.019 kg)
Unit Type of Package 2	S03
Number of Units in Package 2	4
Package 2 Height	11.8 in (30 cm)
Package 2 Width	11.8 in (30 cm)

Package 2 Length	15.7 in (40 cm)
Package 2 Weight	10.121 lb(US) (4.591 kg)

Contractual warranty

Warranty (in months)	18
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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 >](#)

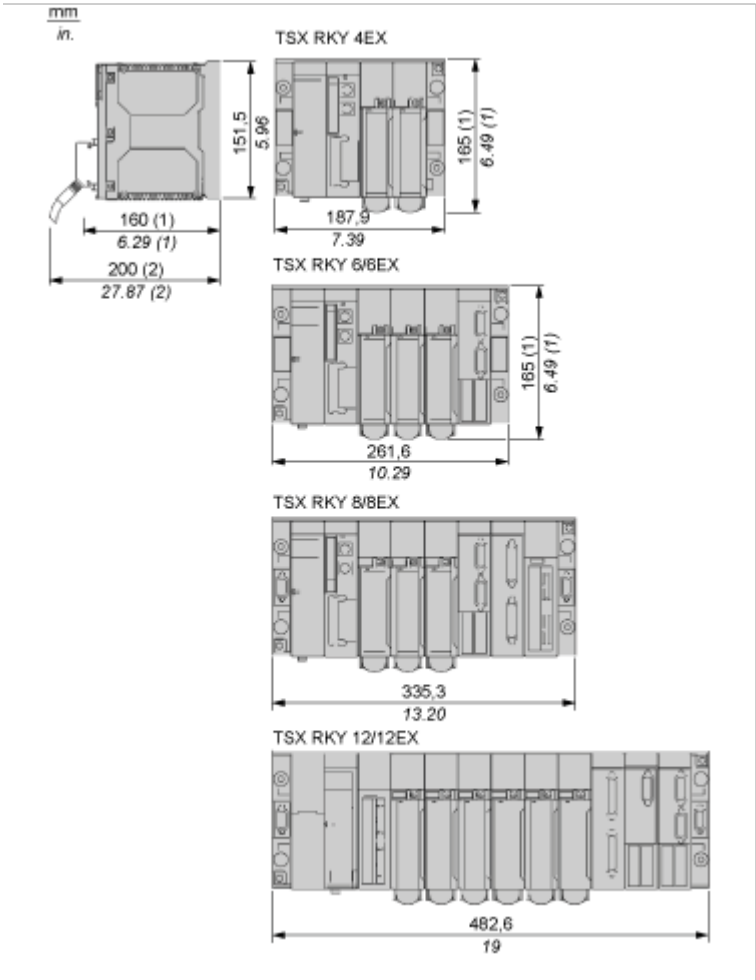
Use Longer

Lifetime extension	
Repair	No

Dimensions Drawings

Standard and Extendable Racks for Modules Mounting

Dimensions of Modules and Racks



- (1) With screw terminal block modules.
- (2) Maximum depth for all types of modules and their associated connectors.