Product data sheet Characteristics

TSXP576634M

Unity processor - transparent ready - 8 racks (12 slots)/16 racks (4/6/8 slots)



Main

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

Complementary

Number of racks 8 12 slots 16 4/6/8 slots Number of slots < = 128 Discrete I/O processor capacity 2040 I/O Analogue I/O processor capacity 512 I/O Number of application specific channel <= 64 Number of process control channel <= 64 Number of process control channel Non isolated serial link female mini DIN RS485 19.2 kbit/s USB port 12 Mbit/s Ethernet TCP/IP RJ45 Port Ethernet 10BASE-T/100BASE-TX	Complementary	
Number of slots <= 128 Subscrete I/O processor capacity	Concept	Transparent Ready
Discrete I/O processor capacity 2040 I/O Analogue I/O processor capacity 512 I/O Number of application specific channel <= 64 Number of process control channel <= 30 up to 90 simple loops Integrated connection type Non isolated serial link female mini DIN RS485 19.2 kbit/s USB port 12 Mbit/s Ethernet TCP/IP RJ45 Port Ethernet Communication module processor 8 5 3 1 Memory description PCMCIA card 16384 kB additional data storage Internal RAM (without PCMCIA card) 2048 kB program and data Internal RAM (with PCMCIA card) 2048 kB program and data Internal RAM (with PCMCIA card) 2048 kB storagem Internal RAM (with PCMCIA card) 2048 kB data Maximum size of object areas Unlimited (elementary and derived data) unlocated internal data Unlimited (DFB and EFB function blocks) unlocated internal data 32768 %Mi located internal bits 128 %MVi internal words located internal data Application structure 1 fast task 1 master task 23 timers 4 auxiliary tasks Execution time per instruction 0.480.56 µs floating points with PCMCIA card 0.480.56 µs floating points with PCMCIA card 0.480.6 µs word or fixed-point arithmetic without PCMCIA card 0.0450.06 µs word or fixed-point arithmetic without PCMCIA card 0.0450.06 µs word or fixed-point arithmetic without PCMCIA card 0.0450.06 µs word or fixed-point arithmetic without PCMCIA card 0.0450.06 µs word or fixed-point arithmetic without PCMCIA card 0.0450.06 µs word or fixed-point arithmetic without PCMCIA card 0.0450.06 µs word or fixed-point arithmetic without PCMCIA card 0.03750.045 µs Boolean with PCMCIA card 0.03750.045 µs Boolean with PCMCIA card 14 Kinst/ms 65 % Boolean + 35 % fixed arithmetic without PCMCIA card 14 Kinst/ms 65 % Boolean + 35 % fixed arithmetic without PCMCIA card 14 Kinst/ms 65 % Boolean + 35 % fixed arithmetic without PCMCIA card 1 ms master task	Number of racks	
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Number of application specific channel <= 64 Number of process control channel <= 30 up to 90 simple loops Non isolated serial link female mini DIN RS485 19.2 kbit/s USB port 12 Mbit/s Ethernet TCP/IP RJ45 Port Ethernet 10BASE-T/100BASE-TX Communication module processor 8 5 3 1 PCMCIA card 16384 kB additional data storage Internal RAM (with processor linternal RAM (with processor lint	Discrete I/O processor capacity	2040 I/O
Number of process control channel -= 30 up to 90 simple loops Non isolated serial link female mini DIN RS485 19.2 kbit/s USB port 12 Mbits Ethernet TCPI/IP RJ45 Port Ethernet 10BASE-T/100BASE-TX Communication module processor 8 5 3 1 Memory description PCMCIA card 16384 kB additional data storage Internal RAM (without PCMCIA card) 2048 kB program and data Internal RAM (with PCMCIA card) 2048 kB data Maximum size of object areas Unlimited (PEB and EFB function blocks) unlocated internal data Unlimited (PEB and EFB function blocks) unlocated internal data 4 %KWi constant words located internal data 32768 %Mi located internal bits 128 %MWi internal words located internal data Application structure 1 fast task 1 master task 1 master task 1 sevent tasks 2 timers 4 auxiliary tasks Execution time per instruction 0.480.56 µs floating points with PCMCIA card 0.0450.69 µs word or fixed-point arithmetic with DCMCIA card 0.0450.045 µs Boolean with PCMCIA card 0.0450.045 µs Boolean with PCMCIA card 0.03750.045 µs Boolean with PCMCIA card 0.03750.05 µs Boolean with PCMCIA card 0.03750.045 µs Boolean with PCMCIA card 0.03	Analogue I/O processor capacity	512 I/O
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USB port 12 Mbit/s Ethernet TCP/IP RJ45 Port Ethernet 10BASE-T/100BASE-TX 8 5 3 1 Memory description PCMCIA card 16384 kB additional data storage Internal RAM (without PCMCIA card) 2048 kB program and data Internal RAM (with PCMCIA card) 2048 kB program and data Internal RAM (with PCMCIA card) 2048 kB data Maximum size of object areas Unlimited (elementary and derived data) unlocated internal data Unlimited (PFB and EFB function blocks) unlocated internal data 4 %KWi constant words located internal bits 128 %Mil located internal bits 128 %Mil located internal bits 128 went tasks 32 timers 4 auxiliary tasks Execution time per instruction 0.480.56 µs floating points without PCMCIA card 0.0450.06 µs word or fixed-point arithmetic with PCMCIA card 0.0450.06 µs word or fixed-point arithmetic with PCMCIA card 0.0450.06 µs word or fixed-point arithmetic with PCMCIA card 0.03750.045 µs Boolean with PCMCIA card 0.03750.045 µs Boolean with PCMCIA card 0.03750.045 µs Boolean with PCMCIA card 14 Kinst/ms 65 % Boolean + 35 % fixed arithmetic with PCMCIA card 14 Kinst/ms 65 % Boolean + 35 % fixed arithmetic with PCMCIA card 14 Kinst/ms 65 % Boolean + 35 % fixed arithmetic with PCMCIA card 14 Kinst/ms 65 % Boolean + 35 % fixed arithmetic with PCMCIA card	Number of process control channel	<= 30 up to 90 simple loops
Second communication module processor S S S S S S S S S	Integrated connection type	USB port 12 Mbit/s
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Unlimited (DFB and EFB function blocks) unlocated internal data 64 %KWi constant words located internal data 32768 %Mi located internal bits 128 %MWi internal words located internal data Application structure 1 fast task 1 master task 128 event tasks 32 timers 4 auxiliary tasks Execution time per instruction 0.480.56 µs floating points without PCMCIA card 0.450.56 µs word or fixed-point arithmetic without PCMCIA card 0.0450.06 µs word or fixed-point arithmetic with PCMCIA card 0.03750.045 µs Boolean without PCMCIA card 0.03750.045 µs Boolean with PCMCIA card	Memory description	Internal RAM (without PCMCIA card) 2048 kB program and data Internal RAM (with PCMCIA card) 7168 kB program
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20.26 Kinst/ms 100 % Boolean with PCMCIA card 14 Kinst/ms 65 % Boolean + 35 % fixed arithmetic without PCMCIA card 14 Kinst/ms 65 % Boolean + 35 % fixed arithmetic with PCMCIA card System overhead 1 ms master task	Execution time per instruction	0.480.56 µs floating points with PCMCIA card 0.0450.06 µs word or fixed-point arithmetic without PCMCIA card 0.0450.06 µs word or fixed-point arithmetic with PCMCIA card 0.03750.045 µs Boolean without PCMCIA card
•	Number of instructions per ms	20.26 Kinst/ms 100 % Boolean with PCMCIA card 14 Kinst/ms 65 % Boolean + 35 % fixed arithmetic without PCMCIA card
	System overhead	
Marking CE	Marking	CE

Local signalling	1 LED yellow transmission activity (TX)	
	1 LED yellow reception activity (RX)	
	1 LED yellow Ethernet link diagnostics (STS)	
	1 LED yellow activity on TER or AUX terminal port (TER)	
	1 LED red processor or system fault (ERR)	
	1 LED red I/O module or configuration fault (I/O)	
	1 LED red Ethernet TCP/IP port fault (ERR)	
	1 LED red collision detection (COL)	
	1 LED green processor running (RUN)	
	1 LED green Ethernet TCP/IP port ready (RUN)	
Current consumption	1880 mA 5 V DC	
Module format	Double	
Product weight	0.61 kg	

Environment

Standards	73/23/EEC 89/336/EEC 92/31/EEC 93/68/EEC GSA 22-2 No 142 CSA 22-2 No 213 Class I Division 2 Group A CSA 22-2 No 213 Class I Division 2 Group B CSA 22-2 No 213 Class I Division 2 Group C CSA 22-2 No 213 Class I Division 2 Group D IEC 61131-2 UL 508
Product certifications	ABS BV DNV GL LR RINA RMRS
Ambient air temperature for operation	060 °C
Ambient air temperature for storage	-2570 °C
Relative humidity	595 % without condensation for storage 1095 % without condensation for operation
Operating altitude	02000 m
Protective treatment	TC
IP degree of protection	IP20
Pollution degree	2

Offer Sustainability

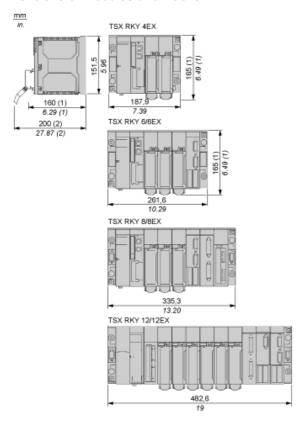
Sustainable offer status	Not Green Premium product
RoHS	Compliant - since 1022 - Schneider Electric declaration of conformity download declaration of conformity



TSXP576634M

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.