

Product datasheet

Specifications

Unity M1 processor - RS232/485 - USB - I/O bus



171CBU78090

Main

Range of product	Modicon Momentum automation platform
Product or component type	Processor
Integrated connection type	USB port

Complementary

Concept	Transparent Ready class B
Web services	Home pages Properties CPU status
Software designation	Unity Pro
Communication service	Modbus messaging 100 words, 200 I/O message per second
Processor name	Spear 320s
Word length	32 bit
Supply voltage limits	4.75...5.25 V
Clock frequency	333 MHz
Topology	Multidrop Modbus
Communication port protocol	Modbus RS485/RS232 - 1 RJ45 19200 bps - 2-wire
Method of access	Master/slave
Control parameter	CRC-16 for Modbus
Addressing	1...247 Modbus
Fail state	Safe I/O mode
Memory description	Program memory IEC 3584 kB Program memory LL984 3584 kB
Register words	26048
I/O limit processor capacity	2048 inputs/2048 outputs
Number of devices	32 Modbus
Exact time for 1 Kinstruction	83 ns
Local signalling	1 LED (green) for processor running (RUN) 1 LED (red) for processor or system fault (ERR) 1 LED (red) for I/O module fault (I/O) 1 LED (yellow) for channel 0 operating (CH0) 1 LED (yellow) for channel 1 operating (CH1)
Marking	CE
Current consumption	500 mA at 5 V DC
Module format	Standard

Product mounting	35 mm symmetrical DIN rail
Height	60.6 mm
Width	144 mm
Depth	53.47 mm
Net weight	0.159 kg

Environment

Material	Lexan
Dielectric strength	0 V not isolated RS485/RS232 5000 V for 1 minute RS485
Product certifications	C-Tick FM
Standards	EN/IEC 61131-2 CSA C22.2 No 142 UL 508
IP degree of protection	IP20
Shock resistance	15 gn during 11 ms sinusoidal vibrations
Resistance to electrostatic discharge	6 kV contact conforming to EN/IEC 61131-2 zone B 6 kV contact conforming to IACS E10 8 kV on air conforming to EN/IEC 61000-4-2
Resistance to electromagnetic fields	15 V/m 80...2700 MHz conforming to EN/IEC 61000-4-3
Ambient air temperature for operation	0...60 °C
Ambient air temperature for storage	-40...85 °C
Relative humidity	5...96 %
Operating altitude	<= 2000 m

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	7.500 cm
Package 1 Width	11.100 cm
Package 1 Length	20.500 cm
Package 1 Weight	236.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	8
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	2.374 kg



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

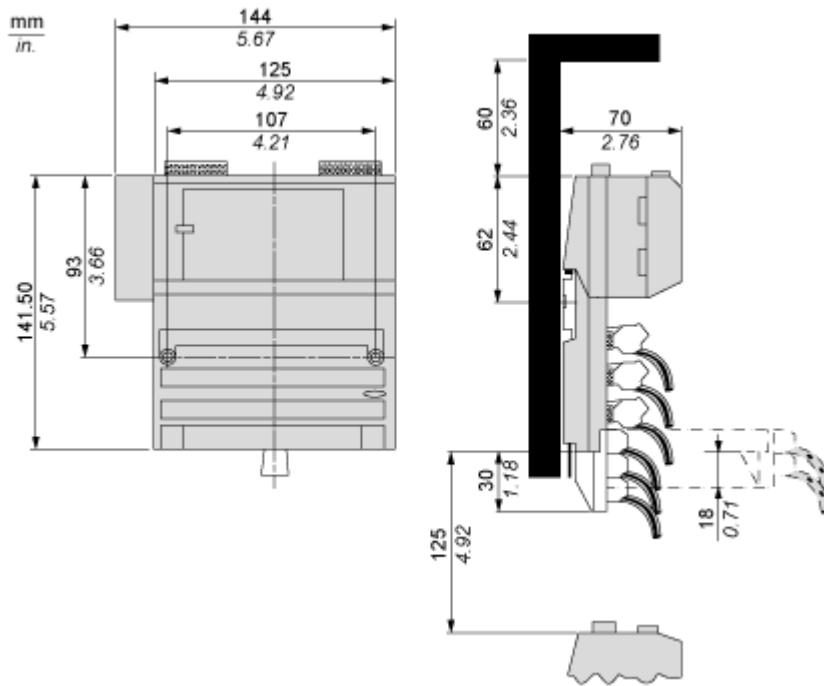
Packaging made with recycled cardboard	No
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	E618c0ab-f100-4cee-8aef-090f73ce1a54
REACH Regulation	REACH Declaration

Use Again

Repack and remanufacture

Take-back	No
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Dimensions Drawings

Processor and Option Adapter on a Typical Base

Mounting and Clearance

Mounting on a Wall