

# Product data sheet

Specifications



## Unity M1E processor - RS232/485 - Ethernet - USB - I/O bus

171CBU98090

### Main

Range Of Product	Modicon Momentum automation platform
Product Or Component Type	Processor
Product Compatibility	Modicon STB I/O
Integrated Connection Type	Ethernet USB port

### Complementary

Concept	Transparent Ready class B
Web Services	CPU status Ethernet statistics Bandwidth monitoring Home pages Properties
Software Designation	Unity Pro
Communication Service	Modbus messaging 125 words, 200 I/O message per second Global Data, 1600 I/O message per second Modbus TCP I/O Scanner and Messaging
Processor Name	Spear 320s
Word Length	32 bit
Supply Voltage Limits	4.75...5.25 V
Clock Frequency	333 MHz
Topology	Multidrop Modbus Star Modbus TCP
Communication Port Protocol	Modbus RS485/RS232 - 1 RJ45 19200 bps - 2-wire Modbus TCP ETHERNET - 1 RJ45 10/100 Mbps - twisted shielded pairs cable CAT 5E UTP
Method Of Access	Client/server Master/slave
Control Parameter	CRC-16 for Modbus CRC-32 for Modbus TCP/IP
Addressing	1...247 Modbus Unique IEEE global address Modbus TCP
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

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

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 (green) for data rate (ETH 100) 1 LED (green) for data rate (ETH LINK) 1 LED (green) for status of Ethernet network (ETH STS)
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	0.163 kg

## Environment

Material	Lexan
Dielectric Strength	0 V not isolated RS485/RS232 5000 V for 1 minute ETHERNET
Product Certifications	FM C-Tick
Standards	UL 508 CSA C22.2 No 142 EN/IEC 61131-2
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	11.200 cm
Package 1 Length	20.700 cm
Package 1 Weight	237.000 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	2.385 kg

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class 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 >](#)

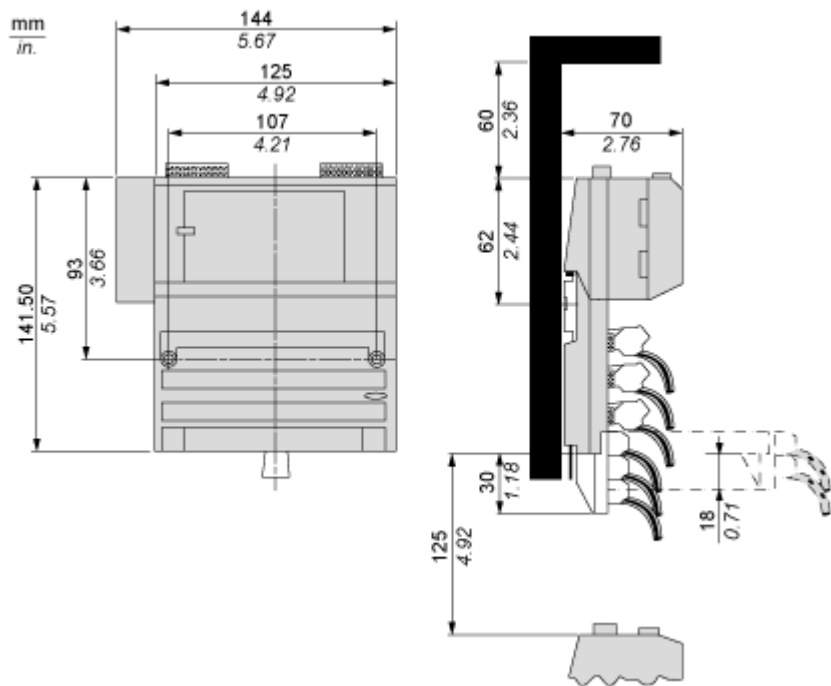
[Guide to assess a product's sustainability >](#)

## Well-being performance

 Mercury Free	
 Rohs Exemption Information	<a href="#">Yes</a>
Reach Regulation	<a href="#">REACH Declaration</a>
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	<a href="#">China RoHS declaration</a>
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

Processor and Option Adapter on a Typical Base



Mounting and Clearance

Mounting on a Wall

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