Uni-COM™ Modules

This guide provides specifications for Unitronics' Uni-COM™ UAC-01EC2 Module.

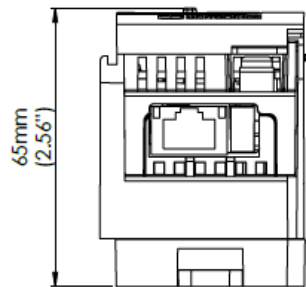The UAC-01EC2 module support EtherCAT. Via this module, UniStream™ controllers can act as EtherCAT masters.

The UAC-01EC2 EtherCAT master module can be used with UniStream™ PLC (USC-B5/B10) family of Programmable Logic Controllers.

Installation Guides are available in the Unitronics Technical Library at www.unitronicsplc.com.
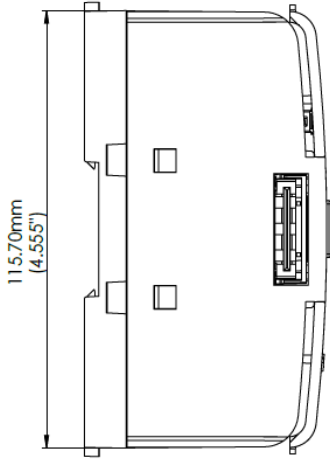
Communication

EtherCAT

Number of ports	1
Port type	100 Base-TX (RJ45 port)
Isolation voltage	500VAC for 1 minute
Cable	Shielded CAT5e cable, up to 100 m (328 ft)
EtherCAT Data Exchange Capability	CoE Based
EtherCAT Topologies	• Line, daisy chain based • Star using EtherCAT junctions • 100m maximum transmission distance between nodes • Pre-defined topology, network scan funcionality is not supported
EtherCAT Capabilities	• Support up to 8 Unitronics SERVO drives (UMD), non-interpulated • EtherCAT terminal system modular I/O (communication between I/O modules is EtherCAT based) • Supported application protocol: CoE (CANopen over EtherCAT), PDO and SDO messages can be sent to slaves via EtherCAT • 1 ms scan time

USB Host

The USB Host port is intended only for UAC-01EC2 firmware updates

Number of ports	1
Port type	Type A
Data rate	USB 2.0 (480Mbps)
Isolation	None
Cable connection	Not allowed
Over current protection	Yes

IO/COM Bus

Bus curent consumption	650 mA

Indicator LEDs		
LNK EtherCAT Link	Green	Ethernet Connected
ECAT EtherCAT Communication	Green	**OFF:** During startup. **ON:** EtherCAT running, topology ok and all slaves communicating **Slow Blink:** EtherCAT communication failure or topology error **Rapid Blink:** Runtime error
Status	Red	**ON:** Power on but no PLC connected **Slow Blink:** During OS startup **Rapid Blink:** PLC communication failure
	Green	**ON:** Power and PLC connected and running **Slow Blink:** During boot **Rapid Blink:** During OS startup
	Orange	**ON**: During firmware upgrade process. **Slow Blink:** Firmware finished successfully **Rapid Blink:** During firmware upgrade failure

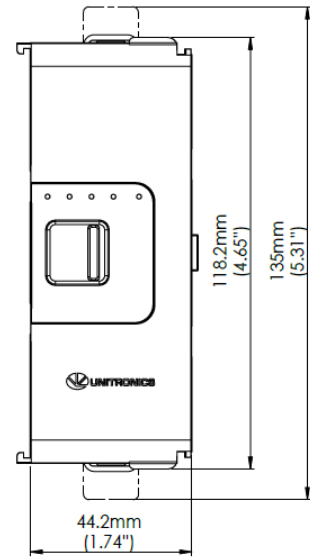| Environmental	
Ingress Protection	IP 20, NEMA 1
Operational temperature	-20°C to 55°C (-4°F to 131°F)
Storage temperature	-30°C to 70°C (-22°F to 158°F)
Relative Humidity (RH)	5% to 95% (non-condensing)
Shock	IEC 60068-2-27, 15G, 11ms duration
Vibration	IEC 60068-2-6, 5Hz to 8.4Hz, 3.5mm constant amplitude, 8.4Hz to 150Hz, 1G acceleration.
Dimensions	
Weight	0.14 Kg (0.308 lb)
Size	As shown in the images below

Bottom View

115.70mm (4.555")	118.2mm (4.65") 135mm (5.31") 44.2mm (1.74")
Side View	Front View