# Uni-COM™ CX Modules

**Technical Specifications**
**UAC-CX-01RS2, UAC-CX-01RS4, UAC-CX-01CAN**

This guide provides specifications for Unitronics' Uni-COM™ CX Modules. Use them to add communication ports to specific models of the UniStream® family of Programmable Logic Controllers. Compatible models comprise a Uni-COM™ CX Module Jack which provides the connection point for the module.

Refer to the specifications of your UniStream model to check whether it is compatible with CX modules.

UAC-CX-01RS2 offers one RS232 port, UAC-CX-01RS4 offers one RS485 port, and UAC-CX-01CAN offers one CANbus port.

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

| **Communication** | |
|---|---|
| **UAC-CX-01RS2 (RS232 module)** | |
| Number of ports | 1 |
| Voltage limits (receiver) | ±20 VDC maximum, relative to Signal Ground (SG) pin |
| Baud rate range | 1,200 – 115,200 bps |
| Isolation voltage | 500VAC for 1 minute |
| Connector type | D-Sub 9 pin, male |
| Cable type | Shielded |
| Cable length | Maximum 15 m (50 ft) |
| **UAC-CX-01RS4 (RS485 module)** | |
| Voltage limits | -7 to +12 VDC maximum, Common+Differential |
| Baud rate range | 1,200 – 115,200 bps |
| Nodes | Up to 32 |
| Isolation voltage | 500VAC for 1 minute |
| Cable type | Shielded twisted pair, in compliance with EIA RS485 |
| Cable length | Maximum 1,200 m (4,000 ft) |
| Termination | Set using DIP Switches |
| **UAC-CX-01CAN (CANbus module)** | |
| Power requirement | None. The CANbus port is internally powered. |
| Isolation voltage | 500VAC for 1 minute |
| Cable type | DeviceNet® shielded twisted pair |

Baud rate and maximum trunk line length for Thick, Mid, and Thin DeviceNet ® cable thickness

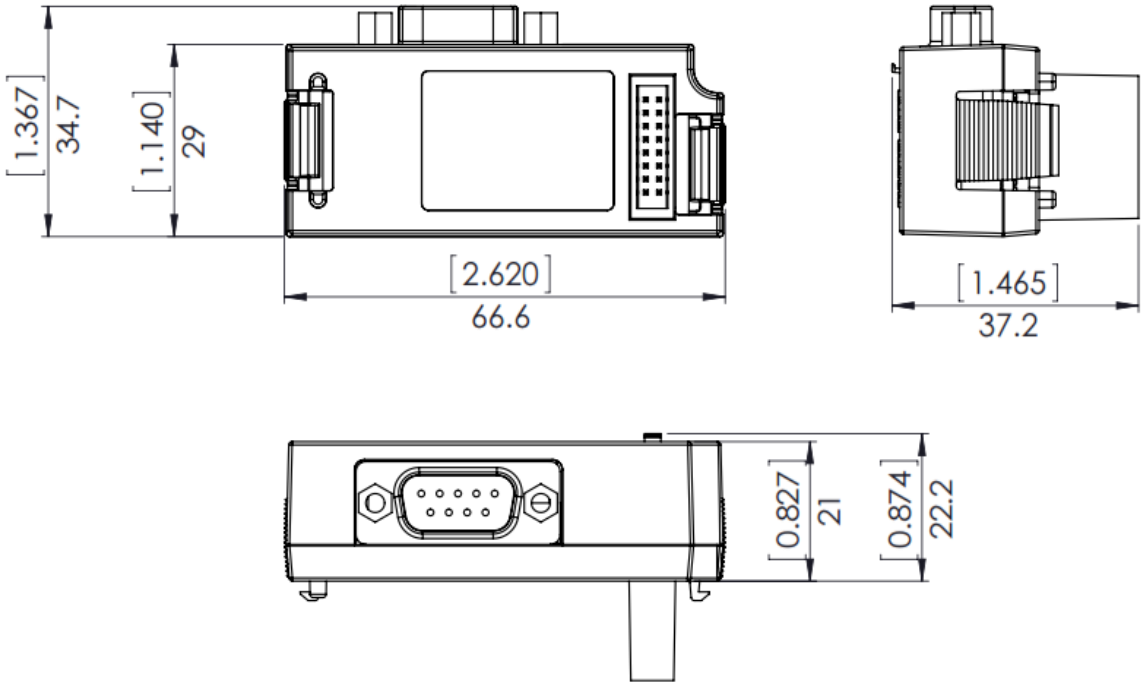
| Baud rate (bps) | Thick cable | Mid cable | Thin cable |
|---|---|---|---|
| 1M | 25m (82 ft) | 25m (82 ft) | 10m (32 ft) |
| 500k | 100m (328 ft) | 100m (328 ft) | 100m (328 ft) |
| 250k | 250m (820 ft) | 250m (820 ft) | 100m (328 ft) |
| 125k, 100k | 500m (1,640 ft) | 300m (984 ft) | 100m (328 ft) |
| 50k, 20k,10k | 1,000m (3,280 ft) | 300m (984 ft) | 100m (328 ft) |

| | |
|---|---|
| Maximum drop line (stub) length | The maximum cable distance from any device on a branching drop line to the trunk line is 2 m (6.5 ft) with any DeviceNet® cable thickness. |

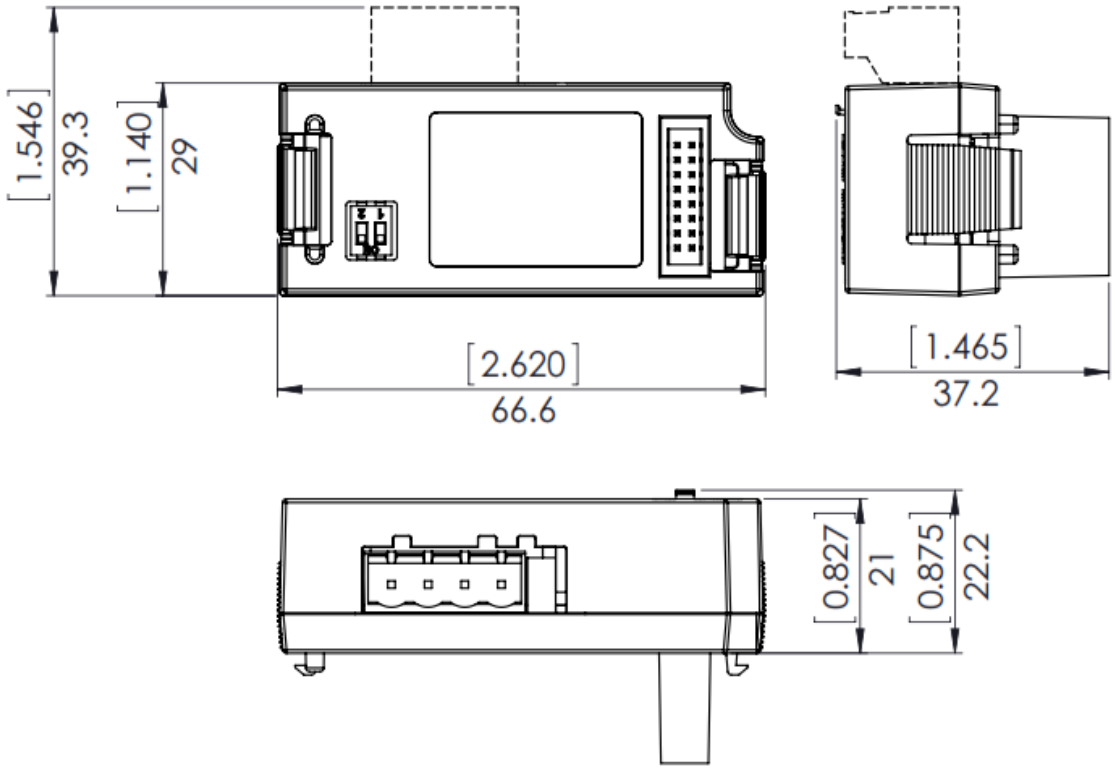
Maximum cumulative drop line (stub) length per baud rate

| Baud rate (bps) | Cumulative drop line length |
|---|---|
| 1M | 5m (16 ft) |
| 500k | 25m (32 ft) |
| 250k | 60m (197 ft) |
| 125k, 100k | 100m (328 ft) |
| 50k, 20k,10k | 100m (328 ft) |
| Nodes | Up to 64 |
| Termination | The trunk line must terminate at both ends with 121Ω, 1%, 1/4W terminating resistors.<br>One CANbus termination resistor is included in every module kit. |

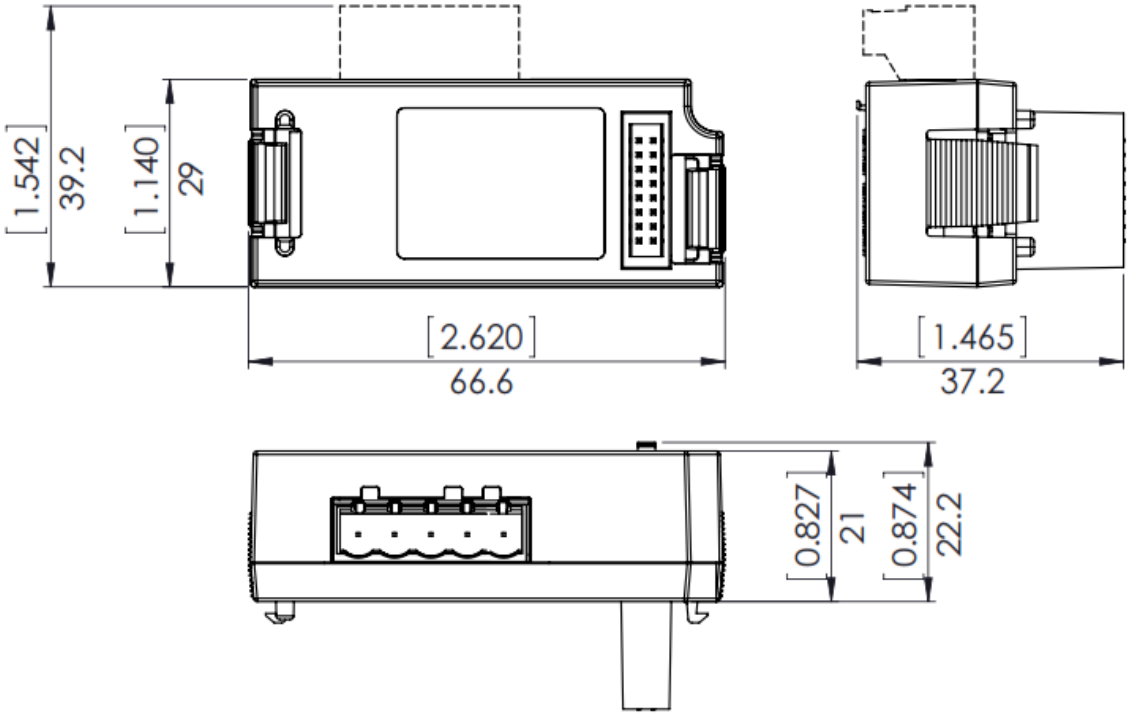
| **Environmental** | | | |
|---|---|---|---|
| Ingress Protection | IP 20, NEMA 1 | | |
| Operational temperature | -20°C to 55°C (-4°F to 131°F) | | |
| Storage temperature | -30°C to 70°C (-22°F to 158°F) | | |
| Relative Humidity (RH) | 5% to 95% (non-condensing) | | |
| Shock | IEC 60068-2-27, 15G, 11ms duration | | |
| Vibration | IEC 60068-2-6, 5Hz to 8.4Hz, 3.5mm constant amplitude, 8.4Hz to 150Hz, 1G acceleration. | | |
| **Dimensions** | | | |
| Weight | UAC-CX-01RS2 | UAC-CX-01RS4 | UAC-CX-01CAN |
| | 29 g (0.064 lb) | 24 g (0.053 lb) | 24 g (0.053 lb) |
| Size | As shown in the images below | | |
| | | | |




UAC-CX-01RS2




UAC-CX-01RS4 is shown




UAC-CX-01CAN

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