

AMX MU-2300

MUSE Automation Controller - 4 Serial, 4 Relays, 4 IR, 4 IO & ICSLan

AMX-CCC023



AMX MU-2300 MUSE Automation Controller

Overview

The AMX MU-2300 MUSE Automation Controller is a powerful, secure, and reliable device that provides a dedicated computing resource running HARMAN Professional's AMX MUSE automation platform. The MU-2300 can simultaneously process a virtually unlimited number of scripts written in JavaScript, Python, or Groovy and natively supports Low-Code development with Node-RED.

AMX MUSE Automation Controllers feature a modern embedded processor that's 10x faster than the processor in AMX NX Controllers, bountiful memory, and rugged, industrial grade eMMC storage. Built on HARMAN's secure Linux platform, MUSE controllers are designed to surpass the requirements of the most secure installations. Additionally, these Controllers natively support HARMAN's HControl (open-API), HiQnet (legacy HARMAN audio devices) and ICSP (legacy AMX control devices) protocols making them the ideal automation processor for any space, environment, or application - old and new.

The MU-2300 is a 1 RU device and includes 4 serial ports, 4 relays, 4 IR ports, and 4 I/O ports. An ICSLan network port provides an isolated network for controlled devices.

Features

- **Modern Embedded Processor** – Power to run a nearly unlimited number of scripts simultaneously
- **Robust eMMC storage** – Industrial grade storage provides reliability in high-access 24/7 installations
- **HControl, ICSP, and HiQNet Translation Built-In** – Native integration with new and legacy HARMAN Professional products
- **Secure Linux Platform** - Engineered to surpass the requirement of the most secure environments
- **ICSLan Port** - Create an isolated network for controlled devices

Specifications

CONTROL PORTS & INDICATORS - FRONT	
STATUS Indicator	RGB LED – see manual for detailed description
ID Button	ID pushbutton used during boot to revert to factory configuration or factory firmware
USB-C Program Port	Connection to PC for virtual terminal for MU configuration
USB-A Host Port	Type-A USB host port <ul style="list-style-type: none"> • USB Mass Storage – for external logging • FLIRC – IR Receiver for IR hand control input
LINK / ACT Indicator	Lit when connected to a network. Blinks upon network activity.
P1 / P2 LED	Programmable LEDs available to control scripts
Serial TX / RX LED	Activity LEDs for each port in each direction. Blinks on activity.
IR TX LED	Activity LEDs for the IR/Serial port. Blinks on transmission.
I/O LED	LED indication of I/O Status. On for digital input or output active
Relay LED	LED indication of Relay state: On for engaged relay

CONTROL PORTS & INDICATORS - REAR	
Power	3.5mm Phoenix 2-pin connector with retention screws for 12vdc input
LAN Port	RJ-45 10/100 BASE-T for Ethernet communication Auto MDI/MDI-X DHCP Client
ICSLan Port	RJ-45 10/100 BASE-T for Ethernet communication Auto MDI/MDI-X DHCP server Provides isolated control network
USB Host Port	2x Type-A USB host port <ul style="list-style-type: none"> • USB Mass Storage – for external logging • FLIRC – IR Receiver for IR hand control input
RS-232/422/485 Port 1	3.5mm Phoenix 10-pin connector <ul style="list-style-type: none"> • 12VDC @ 0.5A • RX- Balanced line input for RS-422/485 • RX+ Balanced line input for RS-422/485 • TX- Balanced line output for RS-422/485 • TX+ Balanced line output for RS-422/485 • RTS Ready to Send for Hardware Handshaking • CTS Clear to Send for Hardware Handshaking • TXD Unbalanced line output for RS-232 • RXD Unbalanced line input for RS-232 • GND – Signal ground for RS-232
RS-232 Ports 2-4	3.5mm Phoenix 5 pin connector <ul style="list-style-type: none"> • RTS Ready to Send for Hardware Handshaking • CTS Clear to Send for Hardware Handshaking • TXD Unbalanced line output for RS-232 • RXD Unbalanced line input for RS-232 • GND – Signal ground for RS-232
Relays 1-4	3.5mm Phoenix 8 pin connector 4 pairs – Contact Closure output for Normally Open contact
IR 1-4	3.5mm Phoenix 8 pin connector 4 pairs – IR/Serial output + ground
I/O 1-4	3.5mm Phoenix 6 pin connector <ul style="list-style-type: none"> • 12VDC @0.5A • 4x I/O pins configurable as Analog In, Digital In, or Digital Out • Ground

POWER	
Power Requirements	DC input voltage (typical): 12 VDC DC current draw: 3A Max DC range, voltage: 9-18 VDC
Power Consumption	36 Watts Max

ENVIRONMENTAL	
Operating Temperature	32° to 122°F (0° to 50°C)
Storage Temperature	14° to 140°F (0° to 60°C)
Operating Humidity	5% to 85% RH
Heat Dissipation (On)	10.2 BTU/hr

GENERAL	
Product Dimensions (HxWxD)	1 RU - 1.7" x 9.14" x 17.32" (43.3 mm x 232.16mm x 440mm)
Product Weight	6.05 lb (2.75kg)
Shipping Weight	TBD
Included Accessories	<ul style="list-style-type: none"> •1x 2-pin 3.5 mm mini-Phoenix PWR connector •1x 6-pin 3.5 mm mini-Phoenix I/O connector •1x 10-pin 3.5mm mini-Phoenix RS232/422/485 connector •3x 5-pin 3.5mm mini-Phoenix RS232 connectors •2x CC-NIRC, IR Emitters (FG10-000-11) •2x removable rack ears
Regulatory Compliance	ICES 003 CE EN 55032 AUS/NZ CISPR 32 CE EN 55035 CE EN 62368-1 IEC 62368-1 UL 62368-1 VCCI CISPR 32 RoHS / WEEE compliant



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3000 RESEARCH DRIVE, RICHARDSON, TX 75082 AMX.com | 800.222.0193 | 469.624.8000 | +1.469.624.7400 | fax 469.624.7153

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