

Mercury Interface Unit (MIU)

Mercury Intercom Solutions

Key Features

- 2RU Interface Unit for multi-channel interfacing
- Up to 32 physical ports for hardware panels, telephony (FXO, FXS), radio interoperability, Cross Domain Solutions (CDS) and analog audio communications
- Up to 64 simultaneous IP audio channels
- Supports low-latency, HD audio and signaling with other Mercury peers
- Hosts up to 64 Trilogy Virtual Panels (iOS, Android or Windows)
- Facilitates interfacing with up to 64 SIP-enabled endpoints supporting both point-to-point and PBX based connectivity.
- Enables RoIP (Radio over IP) over any IP network
- Compatible with conventional telephony equipment (POTS)
- Ideal for extending all types of voice communications over IP networks
- Capable of multicasting encoded audio over IP network using a variety of supported codecs



Trilogy's Mercury Interface Unit acts as a versatile audio processing unit and IP gateway allowing a wide range of external devices to be connected to the intercomnetwork.

Description

The Mercury Interface Unit (MIU) is a 2RU multi-purpose device that provides multi-channel interfacing with radios, conventional and VoIP (SIP) telephony, balanced and unbalanced audio interfacing, and other capabilities over terrestrial and/or satellite IP networks. The MIU is capable of either standalone operation or part of a peer-to-peer distributed network of other Mercury devices supporting a virtually unlimited number of users.

Each MIU can be equipped with any combination of up to four expansion or option boards, which includes the Radio Interface Board (RIB), the Audio Expansion Board (AEB), the Telephone Expansion Boards (FXO/FXS), or the cross-domain capable Mercury Voice Bridge board, providing up to 32 physical interface ports.



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Technical Specifications

Expansion Slots: 4

Expansion Slot Options

Audio Expansion Boards (AEB): 8 ports each Telephone Expansion Boards (FXO, FXS): 4 ports each

Radio Interface Board (RIB): 8 ports each Mercury Voice Bridge (MVB): 8 ports each

Zero Form-Factor Options

Redundant Power Supply

Digital Audio

Frequency response: up to 25Hz to 7kHz

(16kHz sampling)

Distortion: < 0.05% when routed locally

Noise: < -60dB un-weighted

Common mode rejection ratio: >70dB Absolute maximum input voltage: Common Mode ±15V / Differential ±28V

I/O

Front: (1) USB 2.0 Rear: (1) USB 2.0

> GPI - 16 via DB-25M GPO - 16 via DB-25F

PS2 Ports: 2 (keyboard and mouse) **SVGA Port:** 1 rear (for monitor)

100Mbps Ethernet - Normal Mode:

2 RJ45 - combined voice and data traffic via internal switch

100Mbps Ethernet - Special Mode:

2 RJ45 - independent ports for voice and data traffic

Auxiliary Audio - Front:

Mic level in via 3.5mm jack (-46dB)

Headphone level out via 3.5mm jack (8.24dBu)

Auxiliary Audio - Rear: Line level in (8.24dBu)

Line level out (2.22dBu)

Power

Nominal, 100-240V 160W 50-60Hz Internally Fused

IEC mains connector with retainer

Environmental

Operating Temperature: 32° to 122°F (0° to 50°C)

Operating Humidity:

20 to 85%, non-condensing, relative humidity Shock: 15g/11ms half sine over 3 axes Vibration: +/- 1.5g peak acceleration or +/- 4.5mm peak displacement, swept over the

frequency range 5 to 1000Hz

Dimensions

19 x 3.5 x 14.5in (WxHxD) (483 x 89 x 370mm)

Weight

12.6lbs (5.7kg)

Regulatory Compliance

Emissions: EN 55032:2015 & FCC/

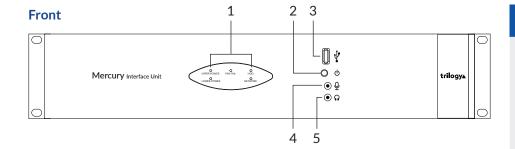
CFR47:Part15 Class A

EN61000-3-2:2014 & EN 61000-3-3:2013

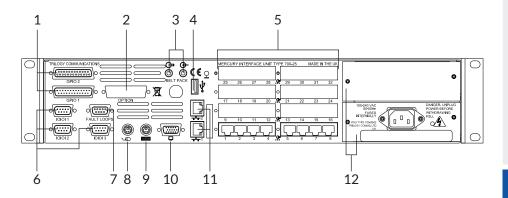
Immunity: EN 55035:2017

Safety: CAN/CSA C22.2 No. 60950-1-07 + Am1:2011 + Am2:2014 ANSI/UL 60950-1-

2014



Back



Legend

Front

- 1. Indicators as follows (clockwise from top left)
 - Upper Power
 - Fan Fault Indication
 - Hard Disk Activity
 - Network
- Lower Power
- 2. Shutdown/Restart
- 3. USB
- 4. Microphone 3.5mm input
- $5. \ \ 3.5 mm \ Line \ Level \ Output$

Rear

- 1. GPIO 2 & GPIO 1
- 2. Camera Mix Board (optional)
- 3. Auxiliary Audio Input/Output
- 4. USB
- 5. Expansion Boards
- 6. Serial
- 7. Fault Loops
- 8. Mouse
- 9. Keyboard 10. SVGA
- 11. Network 1 & Network 2
- 12. Primary / Secondary PSU

Order Code

700-25-06