


ProGrid Digital MADI Devices

ProGrid™ Signal Transport Solution



Linking
People
Together



PG2-MADI-C



PG2-MADI-F

Key Features and Benefits

- Up to 128 input and output MADI channels
- Up to 56/64 input and output SANE channels
- 2 x 100 Mbit Ethernet ports
- 4 x RS485 serial data connections
- Word Clock input and output
- Composite video input and output
- 2 x optical LINK interface with duplex LC connectors
- USB and RS232 ports for configuration and control
- Dual power supply for redundancy

PG2-MADI-F Panels

- 2 x Optical MADI inputs & outputs

PG2-MADI-C Panels

- 2 x CoAx MADI inputs & outputs

High performance, low-latency signal transport solutions for transporting, routing and distributing audio, video, intercom and control data.

Description

PG2-MADI devices have two MADI input and two MADI output ports, allowing the transmission of up to 128 input and 128 output digital audio channels. Each MADI port can be adjusted to handle different formats according to AES10 standards. The PG2-MADI-C is equipped with coaxial MADI interfaces using standard BNC connectors, suitable for DiGiCo and AVID digital consoles. The PG2-MADI-F is equipped with duplex SC multi-mode optical interfaces. As an interface, it is possible to control ProGrid microphone preamps directly from Soundcraft, Studer, Lawo or SSL digital consoles.

Network

Redundant fiber connections can be established using the two provided Optocore Optical LINK interfaces. PG-MADI devices are equipped with either single-mode or multi-mode SFP fiber transceivers. Depending on the selected transceivers, distances from 2300ft (700m) up to 43.5mi (70km) can be covered. The dual redundant ring structure provides maximum safety in a network with low latency. Four RS485 ports allow the transport of a wide range of serial data standards, such as RS422, DMX and MIDI. In addition to the audio signals, video and data signals are transmitted by the fiber connection.

SANE

Each PG2-MADI panel device is equipped with two SANE ports, which enables send and receive of up to 56/64 audio channels via standard CAT5 cable. Use the SANE ports to expand the number of inputs and outputs on ProGrid FX devices. SANE ports can also be used to send Ethernet data. In addition, PG2-MADI devices have two separate LAN ports for 100BaseT Ethernet transmission.

Word Clock

All ProGrid devices are equipped with a Word Clock IN and OUT to enable the synchronization of the devices to an external source and are used to pass on the Word Clock from one device to the next.

ProGrid Configuration Software

The ProGrid Configuration Application Software provides easy access to all configuration and control tools, including routing, naming, storage and recall of configurations on the computer, including an off and online mode with real-time level display.

Technical Specifications

MADI Ports (PG2-MADI-F)

Convention: AES10-1991 / AES10-2003

Input:

Number of Connectors: 2
Connector Type: Optical Duplex SC
Number of MADI Channels: 56 or 64 per Input

Output:

Number of Connectors: 2
Connector Type: Optical Duplex SC
Number of MADI Channels: 56 - 64 per Output

Data Rate: 125 Mbps
Wave Length Output: 1310 nm (typical)
Max. Cable Length: 50/125 μm; 1500m/5000ft (multi-mode)

MADI Ports (PG2-MADI-C)

Convention: AES10-1991/AES10-2003

Input:

Number of Connectors: 2
Connector Type: Coaxial BNC
Number of MADI Channels: 56 - 64 per Output
Data Rate: 125 Mbps
Impedance: Termination, 75ohms

SANE, LAN ports

Audio: TIA - 568A/B; Optocore 200 Mbit/s
LAN: TIA - 568A/B; IEEE - 802.3; 10/100 Mbit/s

Auxiliary Ports

Convention: EIA / TIA-485
Number of Data Channels: 4
Data Channel Type: Digital control data
Data Rate: Up to 10 Mbps

Impedance:

Termination: 330Ohm
Source: ≤ 10Ohm

Word Clock

Hardware standard: 75Ohm / BNC
Data Rate: 44.1 / 48 / 88.2 / 96 / 176.4 / 192 kHz (Depending on used sample rate)
Impedance Input: 1k / 75Ohm software switch
Impedance Output: 75Ohm

Video

Hardware Standard: 75Ohm / BNC
Channels: 1 x input, 1 x output
Format: Composite video

Optical Link

Input, Output, Dual: Full bandwidth
Connection: Duplex LC
Protocol: Optocore
Transmission: Full-duplex
Data Rate: 2 x 2Gbps
Optical Wave Guide
Cable Lengths: Multi-mode fiber 50μm; ≤ 700m, Single-mode fiber 9μm; 10km (70 km on request)

Power Supply

Number of Power Supplies: 2 (with function check and automatic switch-over)
Type: Switch-mode, universal input
Mains Voltage: 100 - 240VAC; 50 - 60Hz; 10VA-typ
Frequency: 50 - 60Hz

Remote Control

Convention: EIA/TIA-232
RS232: Rx/D, Tx/D / 57.600 Baud
USB Port: Interface to PC

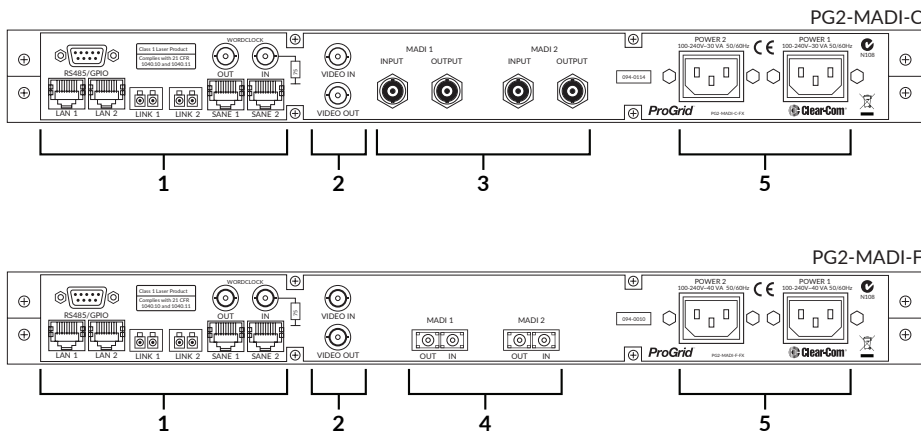
Dimensions

1.73 x 19 x 7.87 in (HxWxD)
(44 x 483 x 20 mm)

Weight

6.0 lbs (2.7 kg)

Back Panels



Legend

Backs

1. Optocore Module
2. Composite Video I/O
3. 128 Coax MADI I/O
4. 128 Fiber MADI I/O
5. Dual Redundant PSU

Order Codes

PG2-MADI-C-FX:
MADI IN/OUT with BNC ports

PG2-MADI-F-FX:
MADI IN/OUT with SC optical ports