

BroaMan Mux22-REDUNDANT

3G/HD/SD-SDI video I/O unit with built-in CWDM module and data

Video, Audio,
Data interface



Product Features

- **3G/HD/SD-SDI capacity**
-16 3G/HD/SD-SDI ports
- **3G/HD/SD-SDI modules**
- Dual Input with adaptive EQ
- Dual Output
- Reclocker for each input or output
- All modules with or without redundancy
- **Built-In CWDM module**
- **Integration with Intercom**
- **Fiber auxiliary ports for 3rd party devices and protocols**
- **Full integration into SANE and Optocore network**
- **Optocore module with 2 LAN ports and 2 SANE/LAN ports**
- **RS485 or GPIO or RS422 optional ports**
- **Tri/Bi-Level sync with Word Clock**
- **Redundant power supplies**
- **Full control with Optocore control software**

BroaMan (Broadcast Manufactur), the German-based broadcast network specialist provides scalable, protocol independent, routing, repeating, transport and distribution of multiple professional video signals, such as 3G/HD/SD-SDI, over optical fiber.

Complete BroaMan systems are built from a collection of modules that include coaxial and optical I/O, routers, repeaters, and optical multiplexers. Using the modular BroaMan building blocks, any system configuration can be realised.

BroaMan systems are built around three main product series – Repeat48, MUX-22 and Route66. Repeat48 series offers basic E-O-E conversion as well as fiber multiplexing. The MUX-22 series is a flexible and small-sized redundant video, audio, data transport and basic routing platform. Route66 enables customisable routing solutions as well as E-O-E conversion and multiplexing.

The MUX-22 REDUNDAT can be used as a video and data (Ethernet, RS485/422 or GPIO) device with up to 16 3G/HD/SD video ports configured with the required number of inputs and outputs in group of two.

The Tri/Bi-level video clock input and output module can be installed in the device on request. The output can be derived from any source in the system.

The MUX-22 seamlessly integrates into the OPTOCORE OPTICAL DIGITAL NETWORK SYSTEM. Analogue or digital audio can be interfaced and sent transparently through the optical network together with video, Ethernet and serial data. Each audio and data channel can be routed to and from every device on the network using the OPTOCORE CONTROL software. The software also enables the monitoring of video signals displaying the status of each SFP built into the device.

The MUX-22 REDUNDAT is equipped with two CWDM modules with auxiliary fiber ports to allow for connection of external fiber systems, such as Optocore, to the CWDM module. All video and data channels are multiplexed onto two duplex fibers. MUX-22 is populated with SDI I/O and multiplexers at the time of manufacturing, according to customer's specifications.

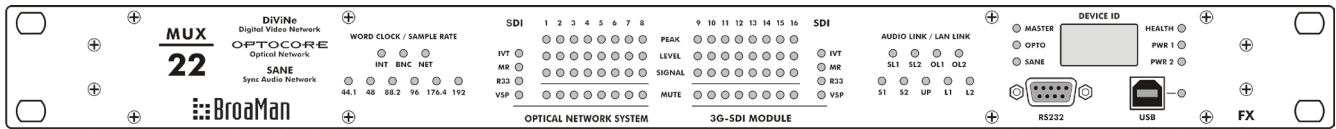
MUX-22 is equipped with a built-in redundant power supply with an automatic switchover. All fiber links can be delivered as redundant with an automatic switchover in case of fiber failure.

MUX-22 units can be used in multiple different applications, starting from a very simple redundant point-to-point links between OB truck and remote location. MUX-22 can also be used in a redundant system topology with BroaMan Route66 units, as a part of large routing solution.

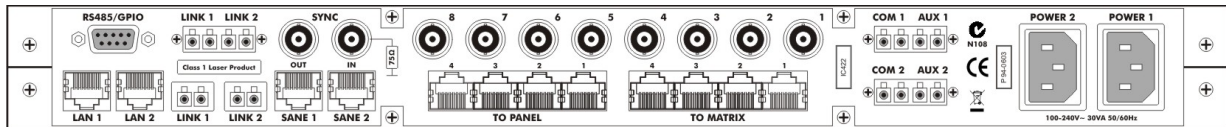


Line Drawings

Front panel



Back panel



Technical Specifications

| | | |
|---------------------------|---|------------------------|
| Video | | |
| Standards | SD, ED, HD, Dual Link, 3G | |
| Complies with SMPTE | 259M, 292M, 344M, 372M, 424M | |
| Interface | SDI – Serial Digital Interface | |
| Intercom | | |
| Connection | RJ45 | |
| Standard | Clear-Com, RTS, AES/EBU RJ45, AES/EBU BNC | |
| Optical Connection | | |
| Connection | Complies with 21 CFR 1040.10 and 1040.11 | |
| Connection | LC | |
| Data rate | Dependent on the Video data rate – no bandwidth restriction | |
| Fiber cable lengths | Standard singlemode transceiver | ≤ 10 km |
| | Special singlemode transceiver | ≤ 80 km (on request) |
| SANE, LAN ports | | |
| Convention | | |
| 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 | |
| Data channels | Digital control data | 4 |
| Data rate | Up to 10 Mbps | |
| Impedance | Termination | 330 Ω |
| | Source | ≤ 10 Ω |
| Word Clock | | |
| Hardware standard | BNC - 75 Ω | |
| Data rate | Dependent on sample rate | Up to 192 kHz |
| Impedance | Output | Output ≤ 5 Ω |
| | Input | Input 75 Ω |
| Drive level | Output | ≥ 1 V _{pp} |
| Zero level | Referring to GND | + 1.7 V |
| Sense level | Input | ≥ 400 mV _{pp} |
| Remote Control | | |
| RS232 | EIA / TIA – 232 | 57 600 Baud |
| USB | USB 2.0 – Device | 12 Mbit/s |
| LAN | IEEE – 802.3 | 10/100 Mbit/s |
| Power Supply | | |
| Type | Switch-mode, universal input | |
| Mains voltage | 100... 240 V | 50 60 Hz |
| Frequency | 50 60 Hz | |
| Cooling | Passive, via surface and ventilation openings on both sides of the device | |
| Dimensions | | |
| 1 RU / 19" | | |
| W x H x D | 19.0 x 1.73 x 7.87 inch | |
| Weight | Dependent on configuration | |

