



BroaMan Repeat48 / Repeat48 WDM

3G/HD/SD-SDI VIDEO / MADI REPEATER
WDM CAPABLE

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 12G/3G/HD/SD-SDI, over optical fibre.

OVERVIEW

DiViNe, the Digital Video Network developed by BroaMan, provides scalable, protocol independent, routing, repeating, transport and distribution of multiple professional video signals, such as SD/HD/3G-SDI, over optical fibre.

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 realized.

BroaMan systems are specified and built to provide an application engineered solution, tailored to the requirements of the customer. The modular nature of BroaMan paves the way for construction of fully cost optimized systems.

Repeat48 is a 1RU device, capable of housing up to 24 SD/HD/3G-SDI coaxial video inputs or outputs that are converted to and from single-mode optical fibre.

Repeat48 CWDM is a 1RU device, capable of housing up to 24 SD/HD/3G-SDI coaxial video inputs or outputs that are that are multiplexed and/or de-multiplexed using a built in Coarse Wave Division Multiplexing (CWDM) or Dense Wave Division Multiplexing (DWDM) modules to a common single-mode optical fibre port.

Repeat48 CWDM equipped with WDM modules may be populated with auxiliary fibre ports to allow for connection of external fibre systems, such as OPTOCORE, to the WDM module.

The built in WDM capability provides the option of transporting up to 24 channels of video and an OPTOCORE stream over one optical fibre.

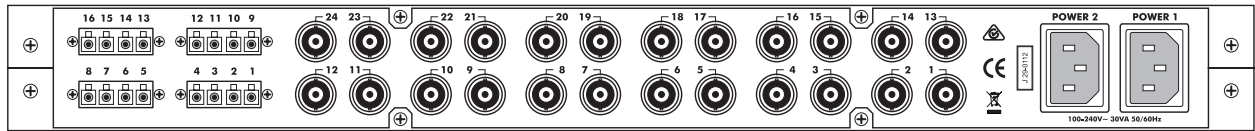
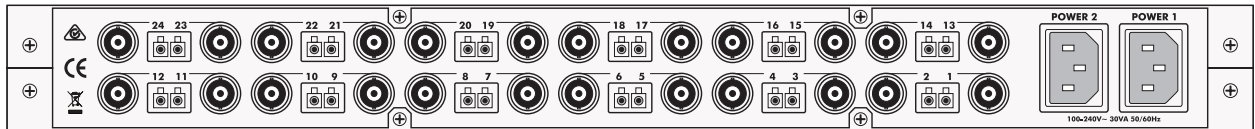
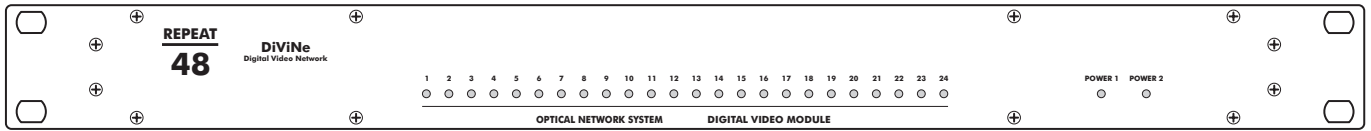
Repeat48 and Repeat48 CWDM are populated with I/O and multiplexers at the time of manufacturing, according to customer specifications.

Repeat48 and Repeat48 CWDM feature a built-in redundant power supply with an automatic switchover.

The front panel provides 24 LEDs indicating signal presence on each port as well as LEDs for status of the power supplies.

Repeat48 and Repeat48 CWDM require no user configuration or operation.

SCHEMATICS



FEATURES

Repeat48 features

- Up to 24 video channels / MADI streams
- Up to 24 EOE converters, which can be configured as:
 - MADI/SD/HD/3G-SDI input to fibre transmitter
 - Fibre receiver to SD/HD/3G-SDI output
 - Fibre converter
- No configuration required
- No user operation required
- Plug and play device
- Channel status LEDs
- Modular hardware design
- Built-in dual power supply with automatic switchover

Repeat48 CWDM features

- Up to 24 video SD/HD/3G-SDI I/O channels / MADI streams
- Built-in WDM, CWDM or DWDM modules
- Auxiliary fibre ports for external MUX/DEMUX connection, enabling OPTOCORE integration

TECHNICAL SPECIFICATIONS

Video					
Standards	SD, ED, HD, Dual Link, 3G				
Complies with SMPTE	259M, 292M, 344M, 372M, 424M				
Interface	SDI - Serial Digital Interface				
Optical Connection					
Connection	LC				
Data rate	Dependent on the Video data rate – no bandwidth restriction				
Fibre cable lengths	<table border="1"> <tr> <td>Standard singlemode transceiver</td> <td>≤ 10 km</td> </tr> <tr> <td>Special singlemode transceiver</td> <td>≤ 80 km (on request)</td> </tr> </table>	Standard singlemode transceiver	≤ 10 km	Special singlemode transceiver	≤ 80 km (on request)
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Special singlemode transceiver	≤ 80 km (on request)				
MADI					
Channel count	up to 64 per MADI stream				
Data rate	125 Mbps				
Termination	75 Ohm				
Power Supply					
Type	Switch-mode, universal input				
Mains voltage	100-240 V				
Frequency	50-60 Hz				
Cooling	Passive, via surface and ventilation openings on both sides of the device				
Dimensions (WxHxD)	1 RU / 19": 483 x 44 x 200 mm / 19.2 x 1.73 x 7.87 inches				
Weight	2.83 kg / 4.41 lbs				