MEDIORNET Compact

MediorNet Compact is the cost-effective and easy-to-use entry to the Riedel MediorNet world of integrated media signal distribution and processing. It is the first fiber-based 21st century stagebox providing the flexibility of a true real-time media network including integrated signal processing at the cost of simple multiplexing point-to-point products. With a network bandwidth of 50 Gbit/s MediorNet Compact provides enough capacity for bi-directional transport of 12 HD-SDI signal, dozens of MADI streams or GBit-Ethernet signals and hundreds of audio channels or intercom ports – ideal for streamlining the infrastructure of any mobile, studio or live event application.

MEDIORNET Compact – Features

» Cost-effective fiber signal transport for 3G/HD/SD-SDI video, audio, data & intercom
» Synchronized real-time network for the price of multiplexing point-to-point fiber products
» Supports any combination of network topologies
» Flexible signal routing incl. point-to-multi-point
» 50 Gbit/s network bandwidth (net 39 Gbit/s)
» Fully compatible with MedliorNet Modular systems
» Integrated signal processing available at every port: Frame Store / Frame Synchronizer, Embedding/De-Embedding, Test Pattern Generator, Caption, Timecode Insertion

Fiber Options   Option Boards

MediorNet Compact PRO

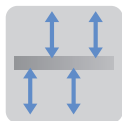
MediorNet Compact PLUS

MediorNet Compact BASIC

Integrated Signal Processing and Conversion

MediorNet Compact provides broadcast quality processing and conversion on board. What used to require additional external equipment is already integrated within the MediorNet system.

MN Frame Store / Frame Synchronizer

Medior Net Frame Store / Frame Synchronizer allows the user to sync all independent free running signals to the same reference (Blackburst or TriLevel) and offers automatic audio-delay adjustment.

MN Embedder / De-Embedder

The 16 channel MediorNet Embedder / De-Embedder embeds, de-embeds and shuffles any AES3/EBU signal.
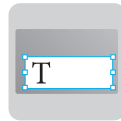
MN Test Pattern Generator

The MediorNet Test Pattern Generator provides standard 100% and 75% colour bars for all video inputs as well as user defined patterns for all video outputs in all common formats in NTSC and PAL.
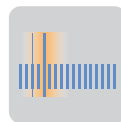
MN Timecode Insertion

The MediorNet Timecode Insertion provides and distributes a timecode via Blackburst sync signal. The Timecode Insertion features runtime compensation and offers an on-screen timecode display.

MN Caption

The MediorNet Caption provides free configuration of position, size, and display of any user defined text.
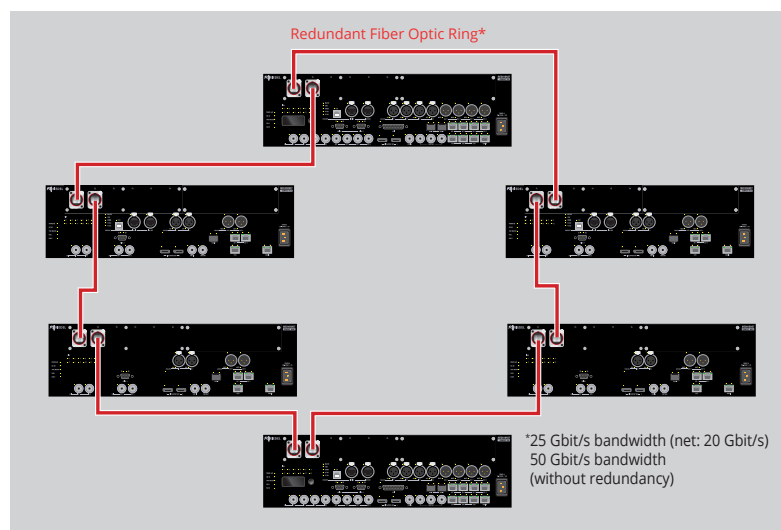
Video Output Phase Shift

The video output phase shift feature is used to shift the the start of the video playout with respect to the genlock. The shift can be lagging (positive values) or leading (negative values). The genlock itself either locks to the reference or to the connected video input.

Video Input and Output Phase and Delay Measurements

These features are used for measuring the total delay between video input signal and video output as well as for showing the time difference between start of video input and reference. Delay and phase values are displayed in microseconds. Using the Video Input to Output Delay Measurement in combination with the video output phase shift you can adjust your video transport in a way to achieve minimum overall transport latency.

MediorNet Compact equipped with 25G Neutrik opticalCON QUAD connectors provides integrated WDM multiplexing and allows quick and easy set-up for bi-directional signal transport

Redundant Fiber Optic Ring*

*25 Gbit/s bandwidth (net: 20 Gbit/s)
50 Gbit/s bandwidth
(without redundancy)

Specifications MediorNet Compact

Features	MediorNet Compact BASIC	MediorNet Compact PLUS	MediorNet Compact PRO
Video In	2 x 3G/HD/SD-SDI	2 x 3G/HD/SD-SDI	4 x 3G/HD/SD-SDI
Video Out	2 x 3G/HD/SD-SDI	2 x 3G/HD/SD-SDI	4 x 3G/HD/SD-SDI
Slot for Option Boards	n/a	n/a	1 x
Option Boards MN-C-OPT-SDI-8I MN-C-OPT-SDI-8O MN-C-OPT-SDI-4I4O	n/a n/a n/a	n/a n/a n/a	8x Video In (3G/HD/SD-SDI) 8x Video Out (3G/HD/SD-SDI)* 4x In / 4x Out (3G/HD/SD-SDI)
DisplayPort Out	2x	2x	2x
AES3/EBU	2x	2x	4x
Audio In (analog)	2x	2x	4x
Audio Out (analog)	2x	2x	4x
RockNet-Interface	n/a	1x	1x
MADI (SFP)	1x	1x	2x
Ethernet	1x	1x	3x
GPI	n/a	n/a	10x GPI In / Out (individually switchable)
Serial (RS232, RS422, RS485)	1x	1x	2x
Sync In/Out	1x In / 1x Out	1x In / 1x Out	1x In / 3x Out

Overall

Operating Temperature	0°C to +40°C (32°F to +104°F)
Power Requirements	100 – 240 VAC / 47 – 63 Hz 12 VDC ±10% (10.8 – 13.2 VDC)
Power Consumption	80 VA
Dimensions (H x W x D)	133 mm x 483 mm x 241 mm (3 RU x 19" x 9.5")
Weight	8.2 kg (18.1 lbs.)

*4x 3G/HD/SD-SDI and 4x HD/SD-SDI

Synchronization:

MediorNet Compact can be synchronized to any external sync source or serve as a sync master for the complete installation. MediorNet Compact supports the following sync standards:

Blackburst NTSC, TriLevel 720p25, TriLevel 1080p29.97, Blackburst PAL, TriLevel 720p24, TriLevel 1080p25, TriLevel 720p60, TriLevel 720p23.98, TriLevel 1080p24, TriLevel 720p59.94, TriLevel 1080i60, TriLevel 1080p23.98, TriLevel 720p50, TriLevel 1080i59.94, WordClock 48kHz, TriLevel 720p30, TriLevel 1080i50, WordClock 96kHz, TriLevel 720p29.97, TriLevel 1080p30, WordClock 192kHz

MEDIORNET
Real-time Media Network

ROCKNET
Digital Audio Network

RILINK
Global Fiber Service

Option Boards:

MN-C-OPT-SDI-4I4O (4x SDI In / 4x SDI Out)
MN-C-OPT-SDI-8I (8x SDI In)
MN-C-OPT-SDI-8O (8x SDI Out)

MN-C-OPT-HDMI-2I/2O (2x HMDI In / 2x HDMI Out)
MN-C-OPT-HDMI-4I (4x HMDI In)
MN-C-OPT-HDMI-4O (4x HMDI Out)
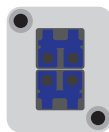

MN-C-OPT-ETH-4 (4x Ethernet)

Fiber Options:

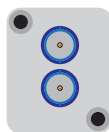25G WDM Neutrik
opticalCON QUAD**

8.5G Neutrik
opticalCON QUAD*
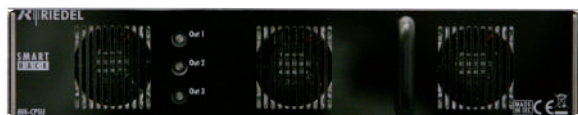

4.25G Neutrik
opticalCON DUO*

8.5G Dual
LC Duplex*

4.25G
Dual ST*

*1310nm SM SFP
**6x MediorNet High-Speed signals per link

Other fiber options available on request
(CWDM, special wavelength, high power SFPs, ...)

MN-CPSU – External Power Supply (for redundancy)

12V / 240W power supply unit in SR12 Smart Rack housing for up to two units in one Smart Rack SR-1 frame. Three 4pin output sockets each for full 20A current with electronic fuse and error indication. Suitable as redundant power supply for MediorNet Compact units.