SETEL

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HD

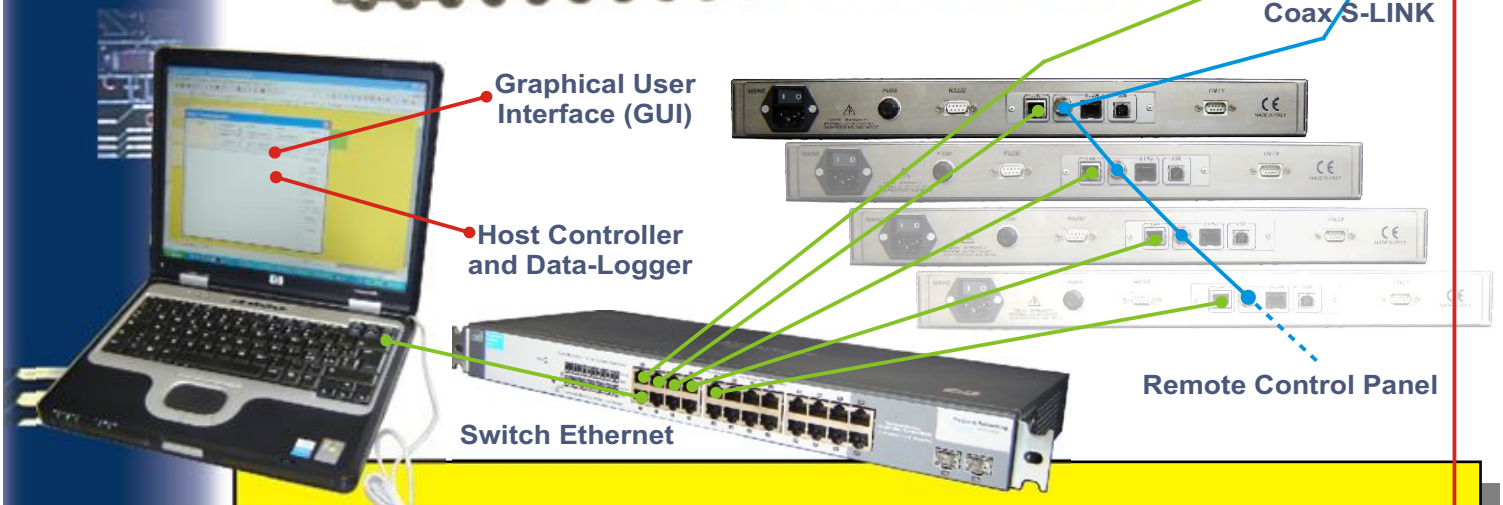
Wideband Digital Multi-Rate Routing Switchers HD50 System

DESCRIPTION

- The HD50 line provides high-quality signal routing up to 32x8 in 1RU.
- Supporting a mixture of almost any type of signal within the same frame, SDI, ASI, HD-SDI, 2HD.
- Employing the latest technology, HD50 allows many functionality at lower power consumption in a compact dimension.
- On-board analog and digital Sync module. Replaceable redundant pwr supply.

FEATURES

- **Expandable from 8x1 to 32x8 in 1RU.**
- **Routes signals from 3 Mb/s to 3 Gb/s.**
- **Digital video signals including SMPTE 310, SDI, ASI, HD-SDI, 2HD.**
- **Automatic re-clocking for standard digital signal formats.**
- **Automatic bypass of re-clocking for NON-standard digital signal formats.**
- **Automatic cable equalization for all frequencies.**



Control of HD50 Routing Switcher

HD50 routing switchers are controlled by means of CPU ARM7 type, so that a “master” controller is realized.
This is necessary to realize the S-LINK protocol .
The serial protocol is a program area which covers the whole series of HD, CM and MD routing switchers and the following remote control panels: T3CSP, FMC, SBC, TCS_CTRL4 and PSPx.
The implemented protocol for this new series of devices allows to utilize different devices (routing switchers and keyboard) in a single “ring”, achieved by means of coaxial connection between devices.
The ETHERNET connection allow:

1. the system configuration;
2. the bridge between S-LINK protocol and Ethernet;
3. the interface to remote control equipment (T2_ETH, FMC_ETH, etc...) and to fulfilment equipment (TCS_ETH, PSP_ETH);
4. the realization of matrix diagnostics.

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HD50 Specifications

Inputs

Number of inputs: from 8 to 32

Signal type:

- SMPTE 259M, 292M and 424M signal formats
- Will route ASI/DVB signals unaffected
- Will route most other <1 Vpp signals, 3 Mb/s to 3 Gb/s

Normal input level:

- 800 mVp-p ± 10%

Equalization:

Auto:

- 1,148 ft (350 m) for SDI bit rates to 270 Mb/s
- 460 ft (140 m) for HD-SDI bit rates to 1.5 Gb/s
- 295 ft (90 m) for HD-SDI bit rates to 2.9 Gb/s

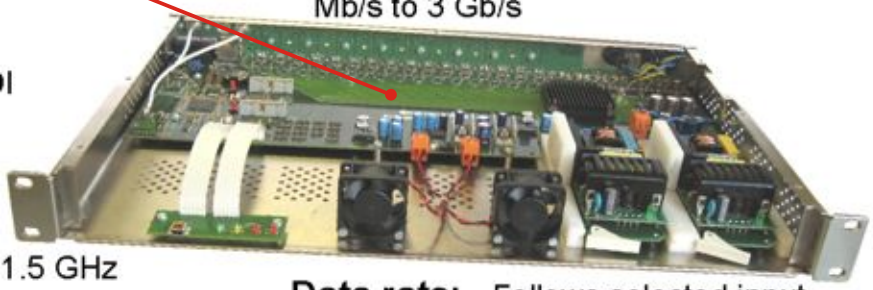
Return loss:

- > –18 dB from 5 MHZ to 1.5 GHz

Connector:

- 75 ohms BNC per IEC 169-8

Single Board with redundant and removable power supply



Output

Number of outputs: From 1 to 8

Signal type (option 1):

- SMPTE 259M and 292M signal formats
- Will route ASI/DVB signals unaffected
- Will route most other <1Vpp signals, 144 Mb/s to 1.5 Gb/s

Signal type (option 2):

- SMPTE 259M/292M and 424M signal formats
- Will route ASI/DVB signals unaffected
- Will route most other <1Vpp signals, 144 Mb/s to 3 Gb/s

Data rate: - Follows selected input

DC offset: - 0 V ± 0.5 V

Rise / fall times:

- 600 ps (measured at 20-80% amplitude) for 259M
- 150 ps for 292M and 424M signal rates

Overshoot: - <10% of amplitude

Reclocking:

- Automatic for all standard SDI and HD-SDI clock rates
- Bypass mode for all non-standard clock rates

Normal output level: 800 mVp-p 10%

Jitter: - < 0.2 UIpp per SMPTE

Return loss:> –18 dB 5MHz to 1.5 GHz

Connector:

- 75 ohm BNC per IEC 169-8

Electrical & Mechanical

Power:

- Universal input
- AC: 90-250 VAC 47-63 Hz, 50W
- Redundant removable 60W power modules

Size:

- 1.74 in. x 19.00 in. x 11.81 in (4.44 cm x 48.26 cm x 30 cm)

Weight:

- 1RU: 7.7 lb (3.5 kg) approx.

Operating temperature:

32° F (0° C) to 122° F (50° C) at 100% power rating

Cooling Forced air/convection.

Interfaces

- Type: **485 -** coaxial or 8-pins RJ
- Type: **Ethernet -** 8-pins RJ - SNMP
- Type: **USB -** Mini USB B type

HD50 Ordering information

HD50 8x2D:	8 inputs 2+2 outputs
HD50 8x4D:	8 inputs 4+4 outputs
HD50 8x8:	8 inputs 8 outputs
HD50 16x2D:	16 inputs 2+2 outputs
HD50 16x4D:	16 inputs 4+4 outputs
HD50 16x8:	16 inputs 8 outputs
HD50 24x2D:	24 inputs 2+2 outputs
HD50 24x4D:	24 inputs 4+4 outputs
HD50 24x8:	24 inputs 8 outputs
HD50 32x2D:	32 inputs 2+2 outputs
HD50 32x4D:	32 inputs 4+4 outputs
HD50 32x8:	32 inputs 8 outputs

NOTE: Specifications are subject to change without notice

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