

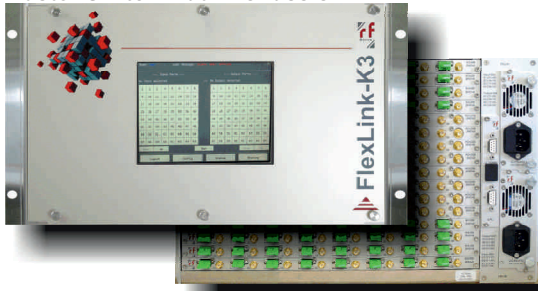
FlexLink K3 Switch-Matrix

L-Band Switch-Matrix, 64:64...256:256

GENERAL

The FlexLink K3 features a professional and flexible L-Band switch-matrix system designed as a modular 6RU/19" master/slave chassis concept. The FlexLink K3 performs as a L-Band routing platform where any input can be routed to any or all outputs. It is designed for today's and future signal management requirements and offers a maximum in flexibility as well as a space and cost efficient routing solution with very low power consumption and superior RF-performance. All matrix boards (input/output switch-boards) are swappable while the in- and output boards are equipped with cascading in- and output interfaces giving the possibility to expand the system at any time without the need of any other additional devices. The modular design allows to mix the in- and output impedances with 50Ohm and 75Ohm as well as optical-fiber (corresponding fiber-input modules). All combinations of in- and outputs are freely configurable manually and remotely. The modular master-slave concept allows various in- and output configurations e.g. from 64:64 (6RU/19") to 256:256 and higher while it is easily expandable in increments of 8 inputs/outputs. Therefore various in- output configurations (like 16:16, 16:32, 16:64, 32:32, 32:64, 64:96, 128:128...) are available. The FlexLink K3 is ideal for flexible signal assignment and perfectly suited for RF-distribution applications in Teleports, Satellite earth stations as well as broadcasting and CATV/IPTV facilities. The FlexLink K3 Switch-Matrix system assures excellent and stable RF-performance, especially at isolation and frequency response while it also features 1:1 power-supply redundancy (hot-swappable). Local access and configuration can be realized via the master-chassis 8" touch-screen LC-Display while remote access and configuration of a complete matrix-system can be done via its ethernet-interface (WEB/http, SNMPv2c).

Master Switch-Matrix Chassis



Slave Switch-Matrix Chassis



FEATURES

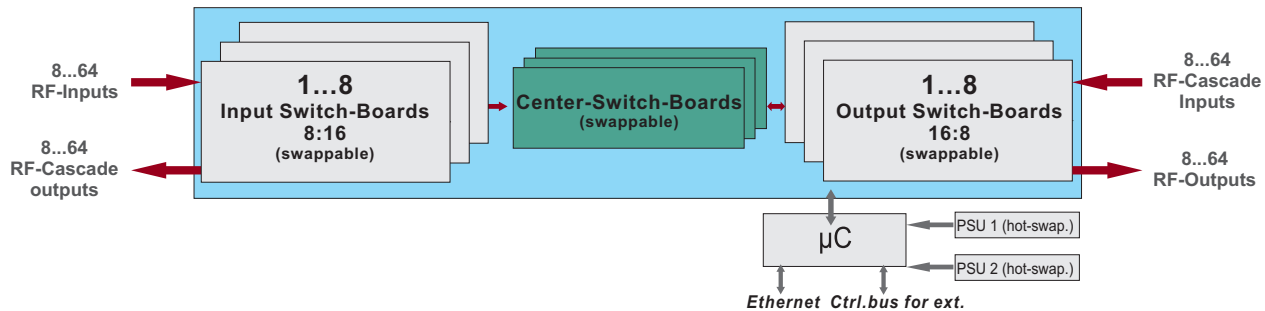
- > Space saving design 6RU/19" (modular master/slave concept)
- > Robust and well engineered mechanical construction for excellent RF performance, low power consumption and low heat generation
- > Flexible and scalable modular design, 8:8...64:64 (6RU/19") easy expandable e.g. to 256:256 in increments of 8
- > Unique cascading concept for future expansion
- > Integrated cascading-interfaces 50Ohm SMA(f), allowing to expand the matrix-system without any other additional devices
- > Swappable input/output switch-boards/modules
- > Coax inputs & outputs 50/75Ohm SMA(f), F(f) or BNC(f) and optical inputs possible, supports mixed input & output config.
- > Input and output routing combination freely configurable
- > No routing limitation via master/slave conception
- > Input RF-power monitoring for all inputs
- > 1:1 redundant power supply (hot swappable)
- > Swappable CPU/LPC (Master and/or Slave control board)
- > Front side 8" touchscreen LC-Display for local access/control
- > Ethernet interface for remote access/configuration (WEB/http, SNMPv2c)
- > Admin & user login protection

TECHNICAL SPECIFICATIONS

- > **Dimensions:** 6RU/19", 61cm deep (Master/Slave)
- > **Matrix configurat. variants:** 8:8 to 64:64 (6RU/19") expandable to e.g 256:256 in increments of 8
- > **Switching elements:** Solid-state switches
- > **Power supply:** 85...230V, 50/60Hz
1:1 redundant (hot-swappable)
- > **Power consumption:** < 200W @ 64:64 configuration)
- > **Frequency range:** 950...2150MHz (L-Band)
- > **IMA3 @ -10dBm:** < -60dBc
- > **Input P1dBc (IP1):** +6dBm
- > **Noise Figure:** 18dB
- > **Insertion Loss / Gain:** 0dB...±1,5dB max.
- > **Frequency Response:** ± 3dB typ. full band
± 0,25dB max. in any 40MHz window
- > **Isolation:** ≥60dB (all ports), 70dB typ.
- > **Max RF Input/Output power:** 0dBm
- > **Input/Output Return Loss:** 14dB min., 16dB typ.
- > **In- & Output connectors** 50Ohm SMA(f) or 50Ohm BNC(f)
75 Ohm F(f) or 75Ohm BNC(f)
- > **Optical fiber input connect.:** E2000 or SC/APC*
(1310...1560nm) *upon request
- > **Local access/control:** 8" Touch-screen LC-Display
- > **Remote access/control:** Ethernet (Web/http, SNMPv2c)
- > **Serial Interface:** RS-232
- > **Master/Slave Chassis cascading/comm.-interface:** RS485
- > **Environmental conditons:** **Operating Temp.:** 00°C...+45°C
Storage Temp.: -10°C...+70°C
Humidity: 90% non condens.

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L-Band Switch-Matrix, 64:64...256:256



SPECIFICATIONS K3 CHASSIS

FlexLink K3m-64:64 Master Switch-Matrix chassis

- **Dimensions:** 6RU/19", 61cm deep
- **Input & output capacity:** 8:8 to 64:64 (expansion via Slave-chassis)
- **Power supply:** 2 x 85...230V, 50/60Hz
1:1 redundant (hot-swappable)
- **Master CPU ctrl.-board:** Swappable
- **Internal center-switches:** Embedded (swappable)
- **Access/Control:** 8" Touch-screen LC-Display
Ethernet (WEB/http,SNMPv2c)
- **Master/Slave cascading/com-interface:** RS485

FlexLink K3s-64-64 Slave Switch-Matrix chassis

- **Dimensions:** 6RU/19", 61cm deep
- **Input & output capacity:** 8:8 to 64:64 (expansion via Slave-chassis)
- **Power supply:** 2 x 85...230V, 50/60Hz
1:1 redundant (hot-swappable)
- **Slave CPU ctrl.-board:** Swappable
- **Internal center-switches:** Embedded (swappable)
- **Access/Control:** via Master-Chassis
- **Master/Slave cascading/com-interface:** RS485

SPECIFICATIONS K3 SWITCH-BOARDS

Input Switch-Boards 8:16

- **FlexLink K3-ISB-8-50:** Input Switch-Board 8:16, L-Band
8 x Input, 50Ohm SMA(f) or BNC(f)
8 x cascading, 50Ohm SMA(f)
- **FlexLink K3-ISB-8-75:** Input Switch-Board 8:16, L-Band
8 x Input, 75Ohm F(f) or BNC(f)
8 x cascading, 50Ohm SMA(f)
- **FlexLink K3-ISB:** Input Switch-Board 8:16, L-Band
8 x Input, 50Ohm SMA(f)
- for optical-fiber input-modules
- **Max. boards per chassis:** 8 boards per Master/Slave
chassis (swappable)

Output Switch-Boards 16:8

- **FlexLink K3-OSB-8-50:** Output Switch-Board 16:8, L-Band,
8 x Output, 50Ohm SMA(f) or BNC(f)
8 x cascading, 50Ohm SMA(f)
- **FlexLink K3-OSB-8-75:** Output Switch-Board 16:8, L-Band,
8 x Output, 75Ohm F(f) or BNC(f)
8 x cascading, 50Ohm SMA(f)
- **Max. boards per chassis:** 8 boards per Master/Slave
chassis (swappable)

SPECIFICATIONS K3 OPTICAL INPUT-MODULES

Optical-Fiber Input modules

- **FlexLink K3-FIM:** Optical Input-module
1 x Optical Input-connector
E2000 or SC/APC*, cascading-
interface 50Ohm SMA(f),
*upon request
- **Max. modules/chassis:** 64 per Master/Slave chassis