

...designed for perfect signals

## Extended L-Band Switch Matrix 8:8 (fan-out/distributive)

The FlexLink S9E-88 represents a professional 8:8 L-Band Switch Matrix (fan-out/distributive) designed in a compact and space-saving 1RU/19" rack mount chassis available with RF coax I/O connectors as well as with optical inputs.

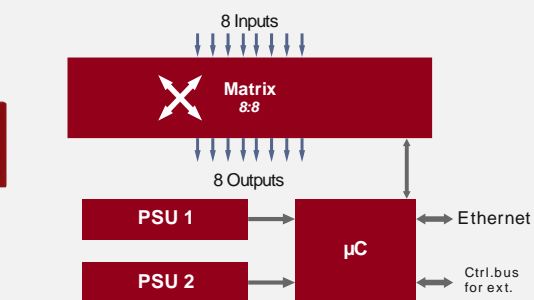
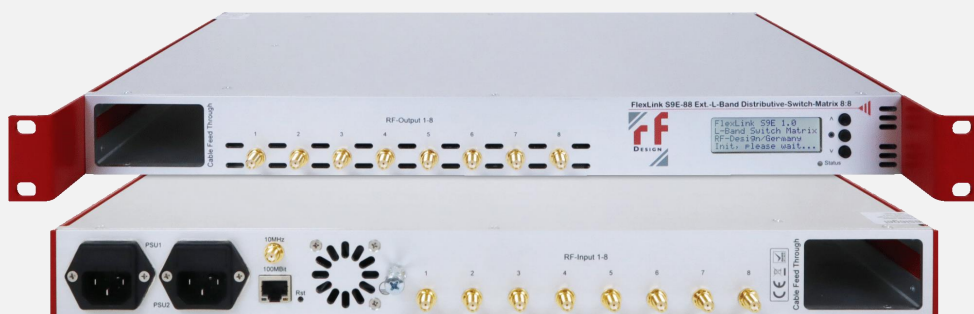
The FlexLink S9E-88 is a future proof L-Band Switch Matrix supporting extended L-Band frequency 850 – 2450MHz, making it a perfect solution also for KA-Band and HTS applications. The unit features an efficient, flexible and reliable solution for today's and future L-Band signal management and allows to switch/route any input to any or all outputs without limitations and interferences, while all combinations of inputs and outputs are configurable locally and remotely.

The FlexLink S9E-88 supports variable gain adjustment, slope-equalization, RF power monitoring, Threshold monitoring/ alarming, as well as 1:1 redundant dual power supply.

Furthermore, the unit features switchable LNB-supply and a 10MHz external reference signal input. Isolation, linearity and frequency response are at the highest level assuring excellent and stable operation with superior RF performance and signal quality. The units come with various coaxial RF connectors for the inputs and outputs and can be equipped with optical inputs as well.

The FlexLink S9E-88 has a LC-Display & keypads for user-friendly local configuration. Remote configuration and monitoring can be done via its Ethernet-Interface (WebGUI, SNMP) while it can also be integrated into a management and control system (NMS or M&C) via SNMP.

The FlexLink S9E-88 is an ideal platform for flexible signal switching applications and perfectly suited for integration into Teleports, Satellite Earth Stations, DSNG's as well as Broadcasting and CATV/IPTV headend architectures.



### FEATURES & BENEFITS

- ▶ Space saving 1RU/19" modular rack mount design
- ▶ Professional switching solution with 16:16 I/O configuration
- ▶ Also available with optical inputs\*
- ▶ Variable gain control (@ any input)
- ▶ L-Band slope equalization 0 to 9dB (@ any input)\*\*
- ▶ RF power monitoring (@ any input)
- ▶ Threshold monitoring/alarming
- ▶ 10MHz external reference input (@ any input)\*\*

- ▶ Switchable LNB supply 13/15/18V, 22kHz (@ any input) 400mA current monitoring, 450mA alarm shutdown\*\*
- ▶ Front side LC-Display & keypads for local configuration
- ▶ Rear side Ethernet-Interface for remote configuration (WebGUI, SNMPv2c)
- ▶ Low power consumption & heat generation
- ▶ Superior RF performance, signal quality and stability
- ▶ Admin & User login protection
- ▶ 1:1 redundant dual power supply

\*upon request / \*\*not available when equipped with optical inputs



## TECHNICAL SPECIFICATIONS

<b>Dimensions:</b>	1RU/19" rack mount; weight approx. 6kgs.
<b>Switching Configuration:</b>	8:8 I/O's (inputs rear side/outputs front side)
<b>Power Supply:</b>	85 – 230V, 50/60Hz, 1:1 redundant (hot-swappable)
<b>Power Consumption:</b>	<25W (without LNB-supply)
<b>Frequency Range:</b>	850 – 2450MHz (extended L-Band)
<b>Input/Output Connectors:</b>	75Ohm F(f), 75Ohm BNC(f)*, 50Ohm SMA(f), 50Ohm BNC(f)*, optical SC/APC*
<b>10MHz External Input:</b>	50Ohm SMA(f), rear side**
<b>Variable Gain Control:</b>	-20dB to +10dB, 1dB steps (@any input)
<b>Slope Equalization:</b>	0 to 9dB, 1dB steps (@any input)**
<b>RF Input Power:</b>	0dBm max.
<b>Output IP1:</b>	+6dBm
<b>Max. RF Output Power:</b>	+10dBm max.
<b>Input/Output Return Loss:</b>	12dB min. 75Ohm Version, 14dB min. 50Ohm Version
<b>Isolation:</b>	Input/Input ≥60dB – Output/Output ≥60dB – Input/Output ≥60dB
<b>Noise Figure:</b>	10dB max., ± 1dB / 24dB typ., ± 1dB (@ full gain) w. optical inputs*
<b>Frequency Response:</b>	± 1dB typ. ± 1,5dB max. in L-Band / ± 3dB max. in extended L-Band*
<b>RF Power Monitoring:</b>	60dB dynamic range (@ any input)
<b>Input Level Control:</b>	Monitoring threshold adjustment/alarming
<b>IMA3 @ -10dBm:</b>	> -56dBc @-10dBm
<b>Switchable LNB-Supply:</b>	13/15/18V/22kHz, 390mA, 400mA max. (@ any input)**
<b>Local Configuration:</b>	LC-Display/keypads
<b>Remote Configuration:</b>	RJ45 100Mbit Ethernet-Interface (WebGUI, SNMPv2c)
<b>Environmental:</b>	ETSI En300, Part 1-3, Class 3.1
<b>EMC/Safety:</b>	EN 50083-2 / EN 60950
<b>Operating Temperature:</b>	-20°C to 50°C
<b>Storage Temperature:</b>	-30°C to 75°C
<b>MTBF:</b>	2000K hrs min. MIL-HDBK-217F (25°C)
<b>Humidity:</b>	90%, non-condensing
<b>RoHS:</b>	Compliant

## OPTICAL SPECIFICATIONS (variants with optical inputs)

<b>Fiber Type:</b>	Single mode 9/125
<b>Optical Input Connector:</b>	SC/APC
<b>Operating Wavelength:</b>	1310 – 1560nm
<b>Optical Input Level:</b>	-10dBm (min. optical sensitivity) to +10dBm max. (damage level)
<b>SFDR:</b>	-107dBc/Hz typ.

## ORDER INFORMATION

Type	Type No.:	Short Description	I/O Connectors
FlexLink S9E-88-50S	9001053	8:8 Switch Matrix, extended L-Band	50Ohm F(f)
FlexLink S9E-88-50B*	on request		50Ohm BNC(f)*
FlexLink S9E-88-75F	9001019		75Ohm SMA(f)
FlexLink S9E-88-75B*	on request		75Ohm BNC(f)*
FlexLink S9E-88-F50S*	on request		Optical In SC/APC; 50Ohm SMA(f) Out*
FlexLink S9E-88-F50B*	on request		Optical In SC/APC; 50Ohm BNC(f) Out*
FlexLink S9E-88-F75B*	on request		Optical In SC/APC; 75Ohm BNC(f) Out*
FlexLink S9E-88-F75F*	on request		Optical In SC/APC; 75Ohm F(f) Out*

\* upon request only / \*\* not available when equipped with optical inputs