

## Extended L-Band Switch Matrix 16:16 (fan-out/distributive)

The FlexLink S9E-1616 represents a professional 16:16 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 or with optical inputs.

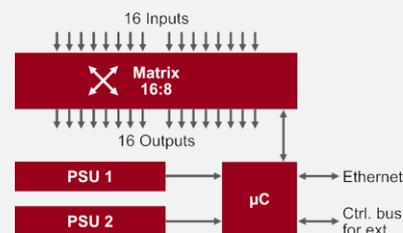
The FlexLink S9E-1616 is a future proof L-Band Switch Matrix supporting extended L-Band frequency 850 – 2450MHz, making it a perfect solution also for KA-Band and HTS applications. The unit features an efficient, flexible and reliable solution for today's and future L-Band signal management and allows 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-1616 supports variable gain control, 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 FlexLink S9E-1616 has a LC-Display & keypads for user-friendly local configuration. Remote configuration and monitoring can be done via its rear side 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-1616 is an ideal platform for flexible signal switching applications and perfectly suited for integration into Teleports, Satellite Earth Stations, DSN'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 only / \*\*Not available when equipped with optical inputs*



## TECHNICAL SPECIFICATIONS

<b>Dimensions:</b>	1RU/19" rack mount; weight approx. 7kgs.
<b>Switching Configuration:</b>	16:16 I/O's (inputs rear side, outputs front side)
<b>Power Supply:</b>	85 – 230V, 50/60Hz, 1:1 redundant
<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>	0dB to +10dB, 1dB steps (@any input)
<b>Slope Equalization:</b>	0 to 9dB, 1dB steps (@any input)**
<b>RF Input Power:</b>	-10dBm nominal, 6dBm max.
<b>Output IP1:</b>	+3dBm
<b>Max. RF Output Power:</b>	+5dBm 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 typ., ± 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) with threshold adjustment/alarming
<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>	2K hrs min. (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-1616-75F	9001018	16:16 Switch Matrix, extended L-Band	75Ohm F(f)
FlexLink S9E-1616-75B	9001040		75Ohm BNC(f)
FlexLink S9E-1616-50S	9001066		50Ohm SMA(f)
FlexLink S9E-1616-50B*	on request		50Ohm BNC(f)*
FlexLink S9E-1616-50S-SC/APC	9001228		Optical In SC/APC; 50Ohm SMA(f) Out
FlexLink S9E-1616-50B-SC/APC*	on request		Optical In SC/APC; 50Ohm BNC(f) Out*
FlexLink S9E-1616-75F-SC/APC	9001227		Optical In SC/APC; 75Ohm F(f) Out
FlexLink S9E-1616-75B-SC/APC*	on request		Optical In SC/APC; 75Ohm BNC(f) Out*

\*Upon request / \*\*Not available when equipped with optical inputs