



# LSA Series

...designed for perfect signals



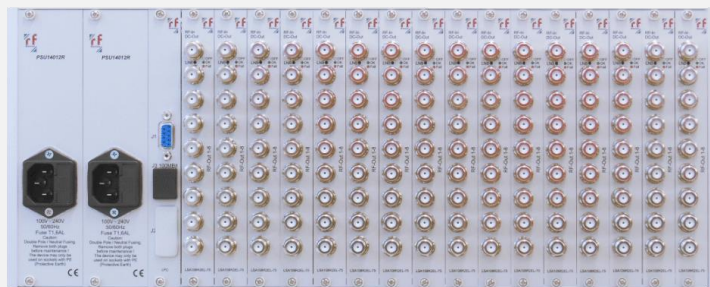
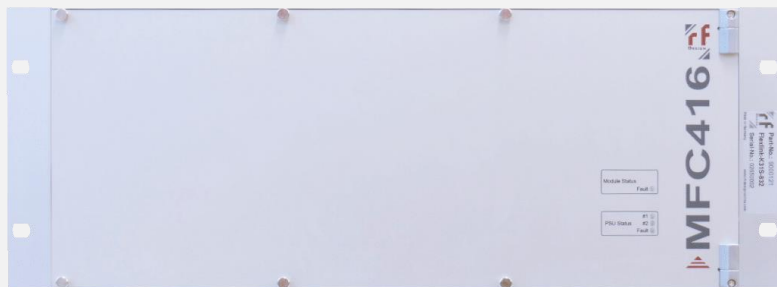
## Modular Active L-Band Splitters (4-way, 8-way, 16-way)

The LSA series represents a high quality and professional modular extended L-Band splitter system combining the MFC main chassis (MFC104R2, MFC316R2 and MFC416R2) and the corresponding LSA active splitter modules (1:4, 1:8, 1:16).

The splitter modules operate at the extended L-Band frequency range (850 – 2450MHz) ready for KA-Band and HTS applications and allow easy splitting of one input to up to 16 outputs with zero loss. The MFC chassis with its maximum capacity of 16 slots can hold up to 16 splitter modules making it a very flexible and expandable solution.

The system supports switchable LNB-supply and 1:1 redundant dual power supply (hot-swappable). Optionally it can be equipped with a 10MHz external reference signal input port for feeding a 10MHz signal e.g. to a LNB. Colored status LED's display the health status of each splitter module, power supply and LNB-supply while the unit is additionally equipped with a potential free alarm/error contact interface.

The LSA series splitter modules are available with 50Ohm SMA(f) or 75Ohm F(f) connectors and are a perfect fit for RF distribution infrastructures in Satellite Ground Stations, Teleports, Broadcasters or Cable/IPTV headend operations.



### FEATURES & BENEFITS

- ▶ Flexible modular extended L-Band splitter system
- ▶ Extended L-Band frequency (850 – 2450MHz)
- ▶ Space saving rack mount design (max. 16 x 1:4 or 1:8 or 8 x 1:16 splitter modules per chassis)
- ▶ Internally amplified zero loss active splitter modules
- ▶ Professional PCB design assuring excellent RF performance, quality and reliability
- ▶ Hot-swappable splitter modules (easy expansion & replacement)

- ▶ Switchable LNB-supply 24VDC max. (ON/OFF), 400mA
- ▶ 10MHz external reference signal input port (Option)
- ▶ Colored status LED's (status for splitter modules, power supply and LNB-supply)
- ▶ Supports alarming via rear side potential free error contact RS232 DB9-female
- ▶ 1:1 redundant dual power supply (hot-swappable)

### TECHNICAL SPECIFICATIONS

<b>Dimensions:</b>	MFC316R2: 3RU/19" rack mount MFC416R2: 4RU/19" rack mount
<b>MFC Chassis Module Slots:</b>	MFC316R2: 16, MFC416R2: 16
<b>Splitter Module Variants:</b>	1:4, 1:8 or 1:16
<b>Power Supply:</b>	85 – 230V, 50/60Hz, 1:1 redundant
<b>Power Consumption:</b>	MFC316R2/MFC416R2: <40W (without DC-supply) / <60W (with DC-supply)
<b>Frequency Range:</b>	850 – 2450MHz (extended L-Band)



<b>I/O Connectors:</b>	50Ohm SMA(f) or 75Ohm F(f)
<b>Input Return Loss:</b>	15dB min
<b>Output Return Loss:</b>	15dB min
<b>Noise Figure:</b>	5dB
<b>Isolation:</b>	20dB min.
<b>Insertion Loss:</b>	0dB typ.
<b>Frequency Response:</b>	50Ohm Type: $\pm 1.5$ dB typ. $\pm 2.0$ dB max, $\pm 0,25$ dB @ any 36MHz 75Ohm Type: $\pm 2.0$ dB typ. $\pm 2.5$ dB max, $\pm 0,3$ dB @ any 36MHz
<b>P1dB:</b>	+4dBm
<b>IMA3 @ -10dBm:</b>	-50dBc
<b>SFDR:</b>	< - 80dBm
<b>Switchable DC-Supply:</b>	18VDC min, 21VDC typ., 24VDC max (ON/OFF), 400mA
<b>Status LED's:</b>	Splitter module, power supply, LNB-supply status monitoring
<b>Alarm Contact:</b>	status monitoring/alarming PSU
<b>Operating Temperature:</b>	0°C to 50°C
<b>Storage Temperature:</b>	-20°C to 75°C
<b>Humidity:</b>	90%, non-condensing
<b>RoHS:</b>	Compliant

## ORDER INFORMATION

### Chassis Variants

Type	Type No.:	Short Description
MFC316R2	9000168	3RU/19" rack mount Main chassis for LSA splitter or LCA combiner modules, 16 slots rear side for max. 16 x 1:4 active splitter modules
MFC416R2	9000121	4RU/19" rack mount Main chassis for LSA splitter or LCA combiner modules, 16 slots rear side for max. 16 x 1:8 active splitter modules or 8 x 1:16 active splitter modules

### Splitter Modules

Type	Type No.:	Short Description	I/O's
<b>1:4 Splitter Modules</b>			
LSA104R3EL-50S	9001148	Active 1:4 extended L-Band splitter module, 850 – 2450MHz, for MFC104R2 or MFC316R2 chassis	50Ohm SMA(f)
LSA104R3EL-75F	9000990		75Ohm F(f)
LSA104R3EL-75B	9001325		75Ohm BNC(f)
<b>1:8 Splitter Modules</b>			
LSA108R4EL-50S	on request	Active 1:8 extended L-Band splitter module, 850 – 2450MHz, for MFC104R2 or MFC416R2 chassis	50Ohm SMA(f)
LSA108R4EL-75F	9000991		75Ohm F(f)
LSA108R4EL-75B	9001120		75Ohm BNC(f)*
(*) on request			
<b>1:16 Splitter Modules</b>			
LSA116R4EL-50S	on request	Active 1:16 extended L-Band splitter module, 850 – 2450MHz, for MFC104R2 or MFC416R2 chassis	50Ohm SMA(f)
LSA116R4EL-75F	9001064		75Ohm F(f)

## OPTIONS

Type	Type No.:	Short Description
Option 096	9000777	10MHz external reference signal port (via common port)