



# LSEL EcoLine Series

...designed for perfect signals



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

The LSEL EcoLine series represents reliable active L-Band splitters in a 1RU/19" rackmount design. They are available as single splitters (1:4, 1:8, 1:16), dual splitters (2 x 1:4, 2 x 1:8 and 2 x 1:16) and quad splitter (4 x 1:4, 4 x 1:8).

The units operate within 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.

Additionally, the units feature switchable LNB-supply while an external 10MHz reference port and 1:1 redundant dual power supply are optionally available. Colored front side LED's display the health status of each power supply and LNB-supply.

The LSEL EcoLine splitters are a perfect fit for Satellite-, Broadcast and Broadband RF distribution infrastructures such as at Teleports, Satellite Earth-Stations or Cable/IPTV operations.



### FEATURES & BENEFITS

- ▶ Space saving 1RU/19" rackmount design
- ▶ Extended L-Band frequency range 850 – 2450MHz
- ▶ Single 1:4, 1:8 and 1:16 splitters
- ▶ Dual 1:4, 1:8 and 1:16 splitters
- ▶ Quad 1:4 and 1:8 splitters

- ▶ Various RF impedances & connectors
- ▶ Internally amplified zero loss active combiner units
- ▶ Switchable LNB-supply 24VDC/400mA (ON/OFF)
- ▶ 10MHz external reference port (**Option 096**)
- ▶ 1:1 redundant power supply (**Option 097**)

### TECHNICAL SPECIFICATIONS

<b>Dimensions:</b>	1RU/19" rackmount, only 150mm deep
<b>Power Supply:</b>	Single 85 – 230V, 50/60Hz & fuse 1A ( <b>1:1 Redundant PSU Option 097</b> )
<b>Power Consumption:</b>	<10W (without LNB-supply) / <20W (with LNB-supply)
<b>Frequency Range:</b>	850 – 2450MHz (extended L-Band)
<b>Input/Output Connectors:</b>	50Ohm SMA(f), 75Ohm F(f), 50Ohm BNC(f)*, 75Ohm BNC(f)* <span style="float: right;">*on request</span>
<b>Input RF Power:</b>	+23dBm max.
<b>Input/Output Return Loss:</b>	14dB min.



<b>Noise Figure:</b>	9dB typ.
<b>Isolation:</b>	20dB min., 23dB typ.
<b>Insertion Loss:</b>	0dB typ., ±1.5dB max.
<b>Frequency Response:</b>	50Ohm Type: ±1.5dB typ. ±2.0dB max, ±0,25dB @ any 36MHz 75Ohm Type: ±2.0dB typ. ±2.5dB max, ±0,3dB @ any 36MHz
<b>P1dB:</b>	+4dBm typ.
<b>IMA3 @ -10dBm:</b>	-50dBc typ.
<b>SFDR:</b>	< - 80dBm
<b>Switchable LNB-Supply:</b>	24VDC (ON/OFF), 400mA
<b>10MHz Reference Port:</b>	50Ohm SMA(f) rear-side ( <b>Option 096</b> )
<b>Status LED's:</b>	Unit power supply, LNB-supply
<b>Operating Temperature:</b>	0°C to 50°C
<b>Storage Temperature:</b>	-20° to 75°C
<b>Humidity:</b>	90%, non-condensing
<b>RoHS:</b>	Compliant

## ORDER INFORMATION

### Type with 50Ohm SMA(f) Connectors

Module Type	Type No.	Short Description
LS104EL-50S	9001168	Active L-Band Splitter, 1 x 1:4, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount
LS108EL-50S	9000751	Active L-Band Splitter, 1 x 1:8, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount
LS116EL-50S	9000755	Active L-Band Splitter, 1 x 1:16, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount
LS2104EL-50S	on request	Active Dual L-Band Splitter, 2 x 1:4, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount
LS2108EL-50S	on request	Active Dual L-Band Splitter, 2 x 1:8, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount
LS2116EL-50S	on request	Active Dual L-Band Splitter, 2 x 1:16, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount
LS4104EL-50S	on request	Active Quad L-Band Splitter, 4 x 1:4, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount
LS4108EL-50S	on request	Active Quad L-Band Splitter, 4 x 1:8, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount

### Type with 50Ohm BNC(f) Connectors

Module Type	Type No.	Short Description
LS104EL-50B	9000748	Active L-Band Splitter, 1 x 1:4, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount
LS108EL-50B	9001170	Active L-Band Splitter, 1 x 1:8, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount
LS116EL-50B	9000756	Active L-Band Splitter, 1 x 1:16, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount
LS2104EL-50B	on request	Active Dual L-Band Splitter, 2 x 1:4, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount
LS2108EL-50B	on request	Active Dual L-Band Splitter, 2 x 1:8, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount
LS2116EL-50B	on request	Active Dual L-Band Splitter, 2 x 1:16, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount
LS4104EL-50B	on request	Active Quad L-Band Splitter, 4 x 1:4, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount
LS4108EL-50B	on request	Active Quad L-Band Splitter, 4 x 1:8, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount

### Type with 75Ohm F(f) Connectors

Module Type	Type No.	Short Description
LS104EL-75F	9000749	Active L-Band Splitter, 1 x 1:4, LNB-supply, 75Ohm F(f), 1RU/19" rack mount
LS108EL-75F	9000753	Active L-Band Splitter, 1 x 1:8, LNB-supply, 75Ohm F(f), 1RU/19" rack mount
LS116EL-75F	9000757	Active L-Band Splitter, 1 x 1:16, LNB-supply, 75Ohm F(f), 1RU/19" rack mount
LS2104EL-75F	on request	Active Dual L-Band Splitter, 2 x 1:4, LNB-supply, 75Ohm F(f), 1RU/19" rack mount
LS2108EL-75F	9000770	Active Dual L-Band Splitter, 2 x 1:8, LNB-supply, 75Ohm F(f), 1RU/19" rack mount
LS2116EL-75F	9001105	Active Dual L-Band Splitter, 2 x 1:16, LNB-supply, 75Ohm F(f), 1RU/19" rack mount
LS4104EL-75F	on request	Active Quad L-Band Splitter, 4 x 1:4, LNB-supply, 75Ohm F(f), 1RU/19" rack mount
LS4108EL-75F	on request	Active Quad L-Band Splitter, 4 x 1:8, LNB-supply, 75Ohm F(f), 1RU/19" rack mount



**Type with 75Ohm BNC(f) Connectors**

Module Type	Type No.	Short Description
LS104EL-75B	on request	Active L-Band Splitter, 1 x 1:4, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount
LS108EL-75B	on request	Active L-Band Splitter, 1 x 1:8, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount
LS116EL-75B	on request	Active L-Band Splitter, 1 x 1:16, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount
LS2104EL-75B	on request	Active Dual L-Band Splitter, 2 x 1:4, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount
LS2108EL-75B	on request	Active Dual L-Band Splitter, 2 x 1:8, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount
LS2116EL-75B	on request	Active Dual L-Band Splitter, 2 x 1:16, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount
LS4104EL-75B	on request	Active Quad L-Band Splitter, 4 x 1:4, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount
LS4108EL-75B	on request	Active Quad L-Band Splitter, 4 x 1:8, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount

**OPTIONS**

Type	Type No.	Short Description
Option 096	9000777	10MHz external reference signal port (via common port)
Option 097	9001165	Redundant Power Supply for EcoLine Splitter and Combiner Single and Dual Version