



## LSEL Series

Active L-Band Splitters, EcoLine

Made  
in  
Germany

### GENERAL

The LSEL series represents reliable and cost effective single and dual active L-Band splitter units in various configurations such as 1:4, 1:8, 1:16 and 1:32 or 2 x 1:4, 2 x 1:8 or 2 x 1:16, housed into a compact and space saving 1RU/19" rack-mount chassis.

This units operate within the extended L-Band frequency-range (850...2450MHz) and allow easy splitting of one L-Band signal to up to 32 interconnections with zero loss. The units feature LNB-supply (front side switchable ON/OFF) and are equipped with 2 power-supply modules assuring 1:1 dual power supply redundancy. Optionally the units can be equipped with various additional features such as a 10MHz external reference port, etc. Front side colored status LED's display the health status of each power-supply and status of LNB-supply.

The LSEL splitters are available with 50Ohm SMA(f) or BNC(f) as well as 75Ohm F(f) or BNC(f) connectors and are a perfect fit for Satellite-, broadcast and broadband RF distribution infrastructures e.g. in Teleports, Earth-Stations or Cable/IPTV headend operations.



### FEATURES

- Space saving 1RU/19" rack mount design
- Extended L-Band frequency (850...2450MHz) also suitable for KA-Band and HTS applications
- Available as single 1:4, 1:8, 1:16 and 1:32 as well as dual 1:4, 1:8 and 1:16 (2 x 1:4, 2 x 1:8 or 2 x 1:16) active splitters
- Available with 50Ohm SMA(f)/BNC(f) or 75Ohm F(f)/BNC(f) connectors
- Internally amplified zero loss active splitter units
- Professional PCB design assuring excellent RF performance, quality and reliability
- Supports switchable LNB-supply 18VDC (ON/OFF), 400mA
- Various available options (e.g. 10MHz external reference input)
- Colored LED's displaying power-supply & LNB-supply status
- Equipped with 1:1 redundant dual power-supply

### TECHNICAL SPECIFICATIONS

- **Dimensions:** 1RU/19", 260mm depth
- **Power supply:** 85...230V, 50/60Hz  
1:1 redundant
- **Power consumption:** < 10W
- **Splitter variants:** 1:4, 1:8, 1:16, 1:32  
Dual 1:4, 1:8, 1:16
- **Frequency range:** 850...2.450MHz
- **Connectors:** 50Ohm SMA(f)/BNC(f) or  
75Ohm F(f)/BNC(f)
- **10MHz reference port:** 50Ohm, rear side (Option)
- **Isolation:** ≥ 18dB
- **Insertion loss:** 0dB (± 1dB)
- **Frequency response:** ± 1dB typ., ± 2dB max.
- **1dB Compression:** + 16dBm @ 1:4  
+ 12dBm @ 1:8  
+ 8dBm @ 1:16 & 1:32
- **Input Return loss:** 12dB min., 14dB max.
- **Output Return loss:** 12dB min., 14dB max.
- **IMA3 @ -10dBm:** < -40dBc all versions
- **Noise figure:** ≤ 5dB
- **LNB supply:** 18VDC (ON/OFF), 400mA  
(fuse protected 450mA)
- **Status LED's:** Power-supply / LNB supply
- **Operating temperat.:** 0...50°C
- **Storage temperature:** - 10°C...70°C
- **Humidity:** 90% non-condensing
- **RoHs:** compliant

### APPLICATION EXAMPLE

1 x L-Band Input



**Active Splitter (LS116-EL)**  
**1:16**



IRD N° 1

IRD N° 16



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### ORDER INFORMATION

#### In-/Output: 50Ohm SMA(f) connectors

- **LS104EL-50S:** Active L-Band Splitter, 1 x 1:4, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount, EcoLine
- **LS108EL-50S:** Active L-Band Splitter, 1 x 1:8, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount, EcoLine
- **LS116EL-50S:** Active L-Band Splitter, 1 x 1:16, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount, EcoLine
- **LS132EL-50S:** Active L-Band Splitter, 1 x 1:32, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount, EcoLine
- **LS2104EL-50S:** Active **Dual** L-Band Splitter, 2 x 1:4, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount, EcoLine
- **LS2108EL-50S:** Active **Dual** L-Band Splitter, 2 x 1:8, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount, EcoLine
- **LS2116EL-50S:** Active **Dual** L-Band Splitter, 2 x 1:16, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount, EcoLine

#### In-/Output: 50Ohm BNC(f) connectors

- **LS104EL-50B:** Active L-Band Splitter, 1 x 1:4, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount, EcoLine
- **LS108EL-50B:** Active L-Band Splitter, 1 x 1:8, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount, EcoLine
- **LS116EL-50B:** Active L-Band Splitter, 1 x 1:16, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount, EcoLine
- **LS132EL-50B:** Active L-Band Splitter, 1 x 1:32, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount, EcoLine
- **LS2104EL-50B:** Active **Dual** L-Band Splitter, 2 x 1:4, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount, EcoLine
- **LS2108EL-50B:** Active **Dual** L-Band Splitter, 2 x 1:8, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount, EcoLine
- **LS2116EL-50B:** Active **Dual** L-Band Splitter, 2 x 1:16, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount, EcoLine

#### In-/Output: 75Ohm F(f) connectors

- **LS104EL-75F:** Active L-Band Splitter, 1 x 1:4, LNB-supply, 75Ohm F(f), 1RU/19" rack mount, EcoLine
- **LS108EL-75F:** Active L-Band Splitter, 1 x 1:8, LNB-supply, 75Ohm F(f), 1RU/19" rack mount, EcoLine
- **LS116EL-75F:** Active L-Band Splitter, 1 x 1:16, LNB-supply, 75Ohm F(f), 1RU/19" rack mount, EcoLine
- **LS132EL-75F:** Active L-Band Splitter, 1 x 1:32, LNB-supply, 75Ohm F(f), 1RU/19" rack mount, EcoLine
- **LS2104EL-75F:** Active **Dual** L-Band Splitter, 2 x 1:4, LNB-supply, 75Ohm F(f), 1RU/19" rack mount, EcoLine
- **LS2108EL-75F:** Active **Dual** L-Band Splitter, 2 x 1:8, LNB-supply, 75Ohm F(f), 1RU/19" rack mount, EcoLine
- **LS2116EL-75F:** Active **Dual** L-Band Splitter, 2 x 1:16, LNB-supply, 75Ohm F(f), 1RU/19" rack mount, EcoLine

#### In-/Output: 75Ohm BNC(f) connectors

- **LS104EL-75B:** Active L-Band Splitter, 1 x 1:4, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount, EcoLine
- **LS108EL-75B:** Active L-Band Splitter, 1 x 1:8, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount, EcoLine
- **LS116EL-75B:** Active L-Band Splitter, 1 x 1:16, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount, EcoLine
- **LS132EL-75B:** Active L-Band Splitter, 1 x 1:32, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount, EcoLine
- **LS2104EL-75B:** Active **Dual** L-Band Splitter, 2 x 1:4, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount, EcoLine
- **LS2108EL-75B:** Active **Dual** L-Band Splitter, 2 x 1:8, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount, EcoLine
- **LS2116EL-75B:** Active **Dual** L-Band Splitter, 2 x 1:16, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount, EcoLine

### OPTIONS

- Option 096: 10MHz external reference signal port (via common port)

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