

# RLS2708L

## 1:1 redundant L-Band Line Amplifier with 1:8 splitter

Made  
in  
Germany

### GENERAL

The RLS2708L is a 1:1 redundant operating line amplifier with an rear-side integrated 1:8 L-Band splitter built into a compact 1RU/19" rack-mount chassis. The unit features 1:8 L-Band splitting while the two redundant operating amplifier modules allow variable gain adjustment so to reach best RF performance within the network. The redundancy switching between these two amplifier modules is done nearly interruption free within a switchover time of less than 5ms. Besides the variable gain adjustment (MGC/AGC) and 1:8 splitting the unit also features slope-equalization, 10MHz external reference, RF power monitoring, LNB-supply as well as 1:1 redundant power-supply (hot-swappable). The RLS2508L features a flexible and compact RF distribution solution and is perfectly suited for applications in Teleports, Satellite Earth Stations, as well as Broadcast- and Broadband facilities wherever accurate RF power, highest stability and availability is necessary. The unit has a front-side LC-Display/keypads for user-friendly local configuration while front-side status LED's indicating amplifier and power-supply status. Remote control and configuration can be done via its rear-side Ethernet-Interface (WebGUI, SNMP). The RLS2508L is available with 50Ohm SMA(f) or 75Ohm F(f) connectors (see order-information).



### FEATURES

- Space saving and compact 1RU/19" design
- 1:1 operating line amplifiers & 1:8 L-Band splitter in one unit
- 1:1 redundant hot-standby operating amplifier modules
- Less than 5ms switchover between amplifier 1 & 2
- Variable gain-adjust -7...+17dB (MGC/AGC), 1dB steps
- Less than 5ms switchover between amplifier 1 & 2
- Supports slope-equalization 0...9dB, 1dB steps
- Front-side monitoring-port (-10dB)
- RF-power monitoring (Input/Output) for both amplifier-modules
- Threshold alarm function and switchable output limiter
- 10MHz external reference signal, rear-side 50Ohm SMA(f)
- Switchable LNB-supply (13/15/18V, 22kHz, 400mA)
- LNB current monitoring (400mA) with alarm shut-off
- 1:1 redundant power supply (hot swappable)
- Local access & configuration via front side LC-Display/keypads
- Front side status LED's indicating amplifier- & power-supply status
- Remote configuration via Ethernet-Interface, RS232/485 (WEB-GUI/SNMPv2c)

### ORDER INFORMATION

- **RLS2708L:** 1:1 redundant L-Band line amplifier with 1:8 splitter, 50Ohm SMA(f), 1RU/19"
- **RLS2708L-75:** 1:1 redundant L-Band line amplifier with 1:8 splitter, 75Ohm F(f), 1RU/19"

### TECHNICAL SPECIFICATIONS

- **Dimensions:** 1RU/19", 260mm deep
- **Power supply:** 85...230V, 50/60Hz  
1:1 redundant (hot-swappable)
- **Power consumption:** <10W
- **Frequency range:** 950...2150MHz (L-Band)
- **Input/Output connectors:** 50Ohm SMA(f) or 75Ohm F(f)
- **Input Return-Loss:** 14dB min.
- **Output Return-Loss:** 18 dB min.
- **Flatness:** ±0.5dB typ., ±1dB max.
- **Variable Gain adjust:** -7...+17dB (Acc. ±0.25dB)  
1dB steps (MGC/AGC)
- **Slope equalization:** 0...9dB, 1dB steps
- **Max. RF output power:** +13dBm (50Ohm) / +11dBm (75Ohm)
- **Noise figure:** 5dB @ 17dB gain
- **IMA3 @ +10dBm:** < -36dBc
- **1dB Compression point:** +13dBm
- **Output limiter:** adjustable -40dBm...+0dBm
- **Splitting configuration:** 1:8
- **Input Isolation:** ≥ 25dB (50Ohm) / ≥ 20dB (75Ohm)
- **Monitoring port:** -10dB (front-side)
- **10MHz reference:** External, rear 50Ohm SMA(f)  
\*Internal upon request
- **Switchable LNB-supply:** 13/15/18V, 22kHz, 400mA
- **Access/Control:** LC-Display/keypads,  
100Mbit Ethernet-Interface,  
RS232/485  
(WEB-GUI, SNMPv2c)
- **Status LED's:** Amplifier & PSU monitoring
- **Operating temperature:** 0...45°C
- **Storage temperature:** -10°C...70°C
- **Humidity:** 90% non-condensing
- **RoHS:** Compliant
- **NEXT PAGE:** RLS2716L, 1:1 redundant L-Band line amplifier with 1:16 splitter

# RLS2716L

## 1:1 redundant L-Band Line Amplifier with 1:16 splitter

Made  
in  
Germany

### GENERAL

The RLS2716L is a 1:1 redundant operating line amplifier with an rear-side integrated 1:16 L-Band splitter built into a compact 1RU/19" rack-mount chassis. The unit features 1:16 L-Band splitting while the two redundant operating amplifier modules allow variable gain adjustment so to reach best RF performance within the network. The redundancy switching between these two amplifier modules is done nearly interruption free within a switchover time of less than 5ms. Besides the variable gain adjustment (MGC/AGC) and 1:16 splitting the unit also features slope-equalization, 10MHz external reference, RF power monitoring, LNB-supply as well as 1:1 redundant power-supply (hot-swappable). The RLS2716L features a flexible and compact RF distribution solution and is perfectly suited for applications in Teleports, Satellite Earth Stations, as well as Broadcast- and Broadband facilities wherever accurate RF power, highest stability and availability is necessary. The unit has a front-side LC-Display/keypads for user-friendly local configuration while front-side status LED's indicating amplifier and power-supply status. Remote control and configuration can be done via its rear-side Ethernet-Interface (WebGUI, SNMP). The RLS2508L is available with 50Ohm SMA(f) or 75Ohm F(f) connectors (see order-information).



### FEATURES

- Space saving and compact 1RU/19" design
- 1:1 operating line amplifiers & 1:16 L-Band splitter in one unit
- 1:1 redundant hot-standby operating amplifier modules
- Less than 5ms switchover between amplifier 1 & 2
- Variable gain-adjust -11...+13dB (MGC/AGC), 1dB steps
- Less than 5ms switchover between amplifier 1 & 2
- Supports slope-equalization 0...9dB, 1dB steps
- Front-side monitoring-port (-6dB)
- Permanent RF-power monitoring (Input/Output) for both amplifier-modules
- Threshold alarm function and switchable output limiter
- 10MHz external reference signal, rear-side 50Ohm SMA(f)
- Switchable LNB-supply (13/15/18V, 22kHz, 400mA)
- LNB current monitoring (400mA) with alarm shut-off
- 1:1 redundant power supply (hot swappable)
- Local access & configuration via front side LC-Display/keypads
- Front side status LED's indicating amplifier- & power-supply status
- Remote configuration via Ethernet-Interface, RS232/485 (WEB-GUI/SNMPv2c)

### ORDER INFORMATION

- **RLS2716L:** 1:1 redundant L-Band line amplifier with 1:16 splitter, 50Ohm SMA(f), 1RU/19"
- **RLS2716L-75:** 1:1 redundant L-Band line amplifier with 1:16 splitter, 75Ohm F(f), 1RU/19"

### TECHNICAL SPECIFICATIONS

- **Dimensions:** 1RU/19", 260mm deep
- **Power supply:** 85...230V, 50/60Hz  
1:1 redundant (hot-swappable)
- **Power consumption:** <10W
- **Frequency range:** 950...2150MHz (L-Band)
- **Input/Output connectors:** 50Ohm SMA(f) or 75Ohm F(f)
- **Input Return-Loss:** 14dB min.
- **Output Return-Loss:** 18 dB min.
- **Flatness:** ±0.5dB typ., ±1dB max.
- **Variable Gain adjust:** -11...+13dB (Acc. ±0.25dB)  
1dB steps (MGC/AGC)
- **Slope equalization:** 0...9dB, 1dB steps
- **Max. RF output power:** +9dBm (50Ohm) / +7dBm (75Ohm)
- **Noise figure:** 5dB @ 13dB gain
- **IMA3 @ +7dBm:** < -36dBc
- **1dB Compression point:** +10dBm
- **Output limiter:** adjustable -40dBm...+0dBm
- **Splitting configuration:** 1:16
- **Input Isolation:** ≥ 25dB (50Ohm) / ≥ 20dB (75Ohm)
- **Monitoring port:** -20dB (front-side)
- **10MHz reference:** External, rear 50Ohm SMA(f)  
\*Internal upon request
- **Switchable LNB-supply:** 13/15/18V, 22kHz, 400mA
- **Access/Control:** LC-Display/keypads,  
100Mbit Ethernet-Interface,  
RS232/485  
(WEB-GUI, SNMPv2c)
- **Status LED's:** Amplifier & PSU monitoring
- **Operating temperature:** 0...45°C
- **Storage temperature:** -10°C...70°C
- **Humidity:** 90% non-condensing
- **RoHS:** Compliant