

RLC2708L

1:1 redundant L-Band Line Amplifier with 8:1 combiner



GENERAL

The RLC2708L is a 1:1 redundant operating line amplifier with an rear-side integrated 8:1 L-Band combiner built into a compact 1RU/19" rack-mount chassis. The unit features 8:1 L-Band combining 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 8:1 combining 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 RLC2508L 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 RLC2508L 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 & 8:1 L-Band combiner in one unit
- 1:1 redundant hot-standby operating amplifier modules
- 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 (-20dB)
- 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) via input port 1
- Switchable LNB-supply (13/15/18V, 22kHz, 400mA), via input port 1
- LNB current monitoring (400mA) with alarm shut-off
- 1:1 redundant power supply (hot swappable)
- Front side status LED's indicating amplifier- power-supply status
- Local access & configuration via front side LC-Display & keypads
- Remote configuration via Ethernet-Interface, RS232/485 (WEB-GUI/SNMPv2c)

ORDER INFORMATION

- **RLC2708L:** 1:1 redundant L-Band line amplifier with 8:1 combiner, 50Ohm SMA(f), 1RU/19"
- **RLC2708L-75:** 1:1 redundant L-Band line amplifier with 8:1 combiner, 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
- **Combiner configuration:** 8:1
- **Input Isolation:** ≥ 25dB (50Ohm) / ≥ 20dB (75Ohm)
- **Monitoring port:** -20dB (front-side)
- **10MHz reference:** External, rear 50Ohm SMA(f)
(via input port #1)
- **Switchable LNB-supply:** 13/15/18V, 22kHz, 400mA
(via input port 1)
- **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:** RLC2716L, 1:1 redundant L-Band line amplifier with 16:1 combiner

RLC2716L

1:1 redundant L-Band Line Amplifier with 16:1 combiner

Made
in
Germany

GENERAL

The RLC2716L is a 1:1 redundant operating line amplifier with an rear-side integrated 16:1 L-Band combiner built into a compact 1RU/19" rack-mount chassis. The unit features 8:1 L-Band combining 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 16:1 combining 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 RLC2716L 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 RLC2716L is available with 50Ohm SMA(f) or 75Ohm F(f) connectors (see order-information).



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- Space saving and compact 1RU/19" design
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- Less then 5ms switchover between amplifier 1 & 2
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- 1:1 redundant power supply (hot swappable)
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ORDER INFORMATION

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- **RLC2716L-75:** 1:1 redundant L-Band line amplifier with 16:1 combiner, 75Ohm F(f), 1RU/19"

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1dB steps (MGC/AGC)
- **Slope equalization:** 0...9dB, 1dB steps
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- **IMA3 @ +7dBm:** < -36dBc
- **1dB Compression point:** +10dBm
- **Output limiter:** adjustable -40dBm...+0dBm
- **Combiner configuration:** 16:1
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- **Monitoring port:** -20dB (front-side)
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