RLC2708L

Active 1:8 L-Band Combiner With 1:1 Amplifier Redundancy

GENERAL

The RLC2708L is a 8:1 L-Band combiner with front-side inserted 1:1 redundant operating line-amplifier modules 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 as well as 1:1 redundant power-supply (hot-swappable). The RLC2708L features a flexible and compact RF-distribution solution which 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 are indicating amplifier and power-supply status. Remote control and configuration can be done via its rear-side Ethernet-Interface (WEB-GUI, SNMP). The RLC2708L is available with 50Ohm SMA(f) or 75Ohm F(f) connectors (see order-information).

FEATURES

- Space saving and companct 1RU/19" design
- 8:1 L-Band combiner & 1:1 operating amplifiers in one unit
- 1:1 redundant hot-standby operating amplifier-modules
- Variable gain-adjust -7...+17dB (MGC/AGC), 1dB steps
- Less then 5ms switchover between ampflifier 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)
- 1:1 redundant power supply (hot swappable)
- Local access & configuration via front side LC-Display/keypads
- Front side status LED´s indicating amplifier- and power-supply status
- Remote configuration via Ethernet-Interface, RS232/485 (WEB-GUI/SNMPv2c)

ORDER INFORMATION

- **RLC2708L:** 8:1 L-Band combiner with 1:1 redundant Line Amplifier, 1RU/19", 50Ohm SMA(f)
- **RLC2708L-75:** 8:1 L-Band combiner with 1:1 redundant Line Amplifier, 1RU/19", 75Ohm F(f)

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)
Return-loss:	16dB 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:	+23dBm (@50Ohm) +21dBm (@75Ohm)
Noise figure:	≤15dB @ 30dB gain
IMA3 @ +20dBm:	< -60dBc
1dB Compression point:	23dBm
Output limiter:	adjustable -40dBm...+20dBm
L-Band combining conf.:	8:1
Input Isolation:	≥ 25dB (50Ohm) ≥ 20dB (75Ohm)
Monitoring port:	-20dB (front-side)
10MHz reference:	External, rear 50Ohm SMA(f) *Internal upon request
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

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