RLS2716A

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

The RLS2716A is a 1+1 redundant operating line amplifier with a 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 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 RLS2716A is available with 50Ohm SMA(f) or 75Ohm F(f) connectors (see order-information).

The RLS2716A 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.

FEATURES & BENEFITS

- Space saving and compact 1RU/19” rack mount 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 -14 to +13dB (Acc. ± 0,25dB), 1dB steps (MGC/AGC)
- Supports slope-equalization 0 to 7dB, 1dB steps
- Front-side monitoring-port (-6dB & -20dB respectively)
- 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 (WebGUI, SNMPv2c)

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TECHNICAL SPECIFICATIONS

Dimensions:	1RU/19” rack mount, weight: approx. 7kgs.
Power Supply:	90 – 264V, 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)
10MHz Reference External Input:	50Ohm SMA(f), rear side
Splitter Configuration:	1:16 rear side
Input/Output Return Loss:	15dB typ.
Frequency Response:	± 1,0dB typ. ± 1,5dB max.
Input Isolation:	≥23dB (@ 50Ohm), ≥20dB (@ 75Ohm)
Variable Gain Control:	-14 to +13dB (Acc. ± 0,25dB), 1dB steps (MGC/AGC)
Slope Equalization:	0 to 7dB, 1dB steps
Max. RF Output Power:	+9dBm
Noise Figure:	+6dBm @ full gain
IMA3 @ +3dBm:	< -40dBc
1dB Compression Point:	+6dBm @ full gain
Monitoring Port:	-20dB Input monitoring, -6dB Output monitoring, 50Ohm SMA(f), front-side
LNB-Supply:	Switchable 13/15/18VDC, 22kHz tone, 400mA
Output Limiter:	Adjustable -44dBm to +3dBm
Threshold Alarm Function:	Adjustable -54dBm to -4dBm
AGC Function:	Adjustable -54dBm to -4dBm, adjustable Lock-Window, adjustable Integration Time
Local Configuration:	LC-Display/keypads
Remote Configuration:	RJ45 100Mbit Ethernet-Interface, RS232/485 (WebGUI, SNMPv2c)
Status LED´s:	Amplifier & PSU health status monitoring
MTBF/MTTR:	>400kHrs at 25°C / 24 hours
MTTF Alarm Function:	Power Supply MTTF Monitoring
Operating Temperature:	0°C to 45°C
Storage Temperature:	-10°C to 70°C
Humidity:	90%, non-condensing
RoHS:	Compliant

ORDER INFORMATION

Type	Type No.:	Short Description	I/O Connectors
RLS2716A-50S	9001048	1+1 redundant L-Band Line Amplifier with 1:16 splitter	50Ohm SMA(f)
RLS2716A-75F	9001055	1+1 redundant L-Band Line Amplifier with 1:16 splitter	75Ohm F(f)*

upon request only

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