HQS125CR-32

...designed for perfect signals
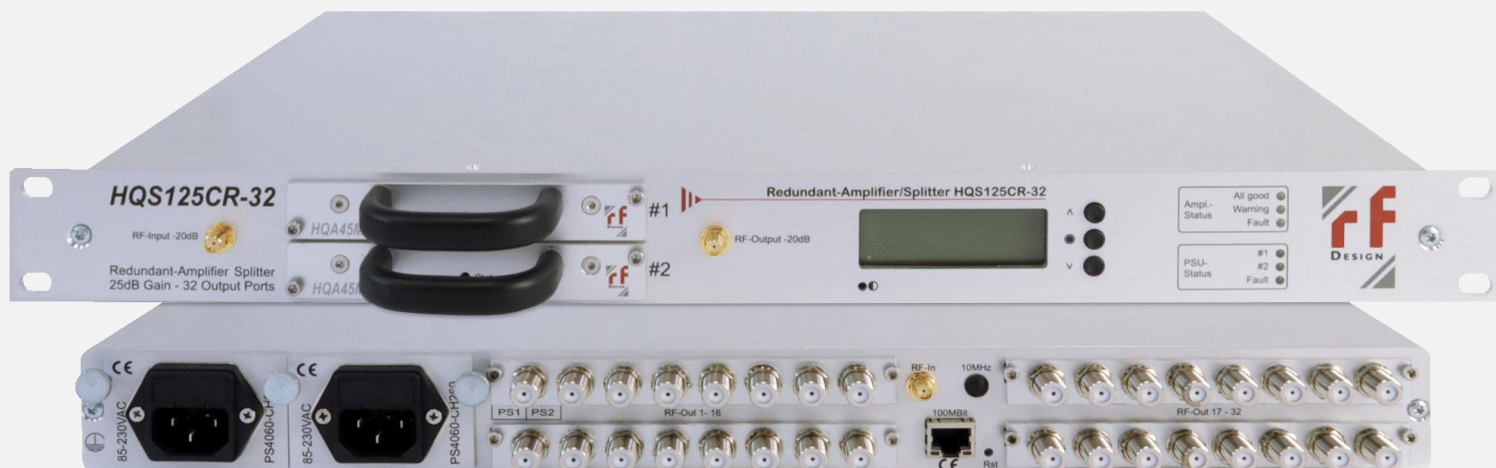
BETTER MADE IN GERMANY

1:1 redundant L-Band Amplifier with modular splitters (max. 1:32)

The HQS125CR-32 is a 1:1 redundant operating line amplifier with rear-side slots for integration of max. 4 passive splitter modules (capacity 1:8 to max. 1:32), built into a compact 1RU/19" rack mount chassis. The unit features 1:8 to 1:32 L-Band splitting while the two high-dynamic redundant operating amplifier modules allow variable gain control from 0 to 25dB as well as slope equalization 0 to 7dB so to reach best RF signal performance within the network.

The redundancy switching between the two amplifier modules is done nearly interruption free within a switchover time of less than 5ms. Besides the variable gain control (MGC/AGC) and max. 1:32 splitting the unit additionally supports slope-equalization, a 10MHz external reference port, RF power monitoring, threshold alarming, 2 front panel monitoring ports, switchable LNB-supply as well as 1:1 redundant dual power supply.

The HQS125CR-32 has a front panel LC-Display/keypads for user-friendly local configuration while front panel status LED´s indicating amplifier and power supply status. Remote configuration & monitoring can be done via its rear side Ethernet-Interface (WebGUI, SNMP).

This high quality unit comes with lots of beneficial functionalities, superior RF performance and excellent signal quality. It is an ideal fit for any RF distribution infrastructure where accurate RF power as well as highest signal stability and availability is necessary such as Teleports, Satellite Earth-Stations, Broadcast facilities and CATV/IPTV headend platforms.

FEATURES & BENEFITS

- Space saving and compact 1RU/19" rack mount design
- 1:1 redundant L-Band amplifier and high quality modular splitter (1:8 expandable to 1:32) in one unit
- 1:1 redundant hot-standby operating amplifier modules
- Hot-swappable amplifier & splitter modules
- Less than 5ms switchover between amplifiers 1 & 2
- Variable gain-adjust 0 to 20dB, 1dB steps (MGC/AGC*)
- Slope-equalization 0 to 7dB, 1dB steps
- RF-power monitoring for both amplifier-modules (Input & Output)
- Threshold alarm function and switchable output limiter

- 2 front panel monitoring ports -20dB (Input & Output)
- 10MHz external reference port, rear-side 50Ohm SMA(f)*
- Switchable LNB-supply (13/15/18V, 22kHz tone) including LNB current monitoring (400mA) with alarm shut-off*
- 1:1 redundant dual power supply (hot-swappable)
- Front side status LED´s for amplifier & power supply status
- Local access & configuration via front side LC-Display/keypads
- Remote configuration via Ethernet-Interface, RS232/485* (WebGUI, SNMPv2c)

TECHNICAL SPECIFICATIONS

Dimensions:	1RU/19" rack mount; 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/Output Return Loss:	14dB typ.
Amplifier Capacity:	2 amplifiers (front side), 1:1 redundant operation
Amplifier Switchover Time:	<5ms
Splitter Capacity:	4 slots (rear side), max. 1:32 (increments of 8)
Frequency Response:	±1,5dB max.
Variable Gain Control:	0 to 20dB (accuracy ±0,25dB), 1dB steps, MGC/AGC
Slope Equalization:	0 to 7dB, 1dB steps
RF Output Power:	+4dBm max.
Noise Figure:	<6dB @ 25dB gain
Spurious Free Dynamic Range:	< -76dBm
IMA3 @ 0dBm:	< -40dBc typ.
1dB Compression Point:	+8dBm @ full gain
Output IP1:	+3dBm
Isolation:	≥20dB min.
I/O Monitoring Ports:	-20dB for input and -40dB for output, 50Ohm SMA(f), front-panel
Threshold Alarm:	Adjustable -40dBm to -10dBm
Output Limiter:	Adjustable -40dBm to +0dBm
10MHz Reference:	External, rear-panel, 50Ohm SMA(f)*
LNB-Supply:	Switchable 13/15/18VDC, 22kHz tone, ON/OFF, 400mA*
Local Access/Configuration:	Front-panel LC-Display/keypads
Remote Access/Configuration:	100Mbit Ethernet-Interface (WebGUI, SNMPv2c), RS232** or RS485**
Status LED´s:	Amplifier & Power supply monitoring
Operating Temperature:	0°C to 45°C
Storage Temperature:	-10°C to 70°C
Humidity:	90%, non-condensing
RoHS:	Compliant

*Option / **upon request only

ORDER INFORMATION

Type	Type No.:	Short Description	I/O Connectors
HQS125CR-32	9000942	1:1 redundant L-Band line amplifier with 2 x Amplifier Module HQA43M01, including 1 x 1:8 splitter (4 slots for 8-way splitter module, max. 1:32 splitter capacity)	50Ohm SMA(f)
HQS125CR-32-75	on request		75Ohm F(f)
Splitter/Combiner Modules			
HQS125R-SPL108M-50S	9001002	8-way passive splitter/combiner module, L-Band for HQS125CR-32 & HQC125CR-32 units	50Ohm SMA(f)
HQS125R-SPL108M-75F	9000943		75Ohm F(f)

OPTIONS

Type	Type No.:	Short Description
HQS125CR-LNB	on request	LNB-supply 13/15/18VDC, 22kHz, including 10MHz signal input port rear side, 50Ohm SMA(f)