

SDRX-43-BTF

High Power 4G (TD-LTE) / 5G (NR) Digital Repeater



ADRF's SDRX-43-BTF is a simple and ideal solution that enhances 4G (TD-LTE) and 5G (NR) coverage. It's the first carrier grade high-power repeater supporting the entire BRS spectrum. The SDRX-43-BTF provides a cost-effective alternative to base stations to leverage the existing infrastructure to efficiently meet coverage needs. When 5G coverage is needed in metropolitan or rural shadow areas, the SDRX-43-BTF can provide optimal wireless coverage with unprecedented throughput speeds.

High gain and output power ensure wireless coverage in even the most remote locations. Through digital signal processing (DSP) filter technology, the SDRX-43-BTF helps eliminate adjacent channel interference.

The SDRX-43-BTF can be installed inside the SDR-ICS chassis or individually wall mounted. The system can be configured and monitored remotely using a web-based GUI. Remote access and monitoring provides the ability to receive alarm notifications or make minor adjusts instantaneously.



Product Features

- Up to 3 non-contiguous selectable channels
- Each selectable channel can support from 5 MHz to 100 MHz
- Supports both LTE + 5GNR or 5GNR Standalone
- Up to 20W composite DL output power
- Up to 95dB of gain with selectable gain range of 40dB
- Built-in ALC function to prevent overpower

Product Specifications

SDRX-43-BTF High Power 4G (TD-LTE)/ 5G (NR)
Digital Repeater



RF Specifications

Frequency		2496 - 2690 MHz
Technology		4G (LTE) / 5G (NR)
Composite Output Power	DL	43 dBm
	UL	30 dBm
System Gain		55 - 95 dB
Filter Bandwidth		5 / 10 / 15 / 20 / 25 / 30 / 40 / 50 / 60 / 70 / 80 / 90 / 100 MHz
Simultaneous Filter Support		Up to 3
Spurious Emission		FCC Rule Compliant
Noise Figure		≤ 5 dB @ Max Gain
System Delay		≤ 4 μs
EVM		≤ 3.5% @ 5G (NR) 256QAM
Impedance		50 Ω
VSWR		< 1.5 : 1
Network Management		Web-GUI, SNMP, SNMP-Traps
Coupling Test Port	Donor	-20 dB
	Server	-40 dB
Power Supply		100 - 240 VAC, 60 Hz (w/ battery backup function)
Power Consumption	AC	260 W
	DC	200 W
DC Operating Voltage		27V DC
Grounding		External Threaded Stud

Mechanical Specifications

Dimension (W x D x H)		5.7 x 10.3 x 17.7 in (145 x 262 x 450 mm)
Weight	Repeater	29.1 lbs (13.2 kg)
	Bracket	2.9 lbs (1.3 kg)
RF Connector	Antenna	4.3-10 (Female)
	Coupling	SMA (Female)
Interface		Ethernet (RJ-45)
Mounting Type		Rack / Wall Mount
Operating Temperature		23° - 122° F (-5° - 50° C)
Humidity		5% - 90% RH (Non-Condensing)

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