

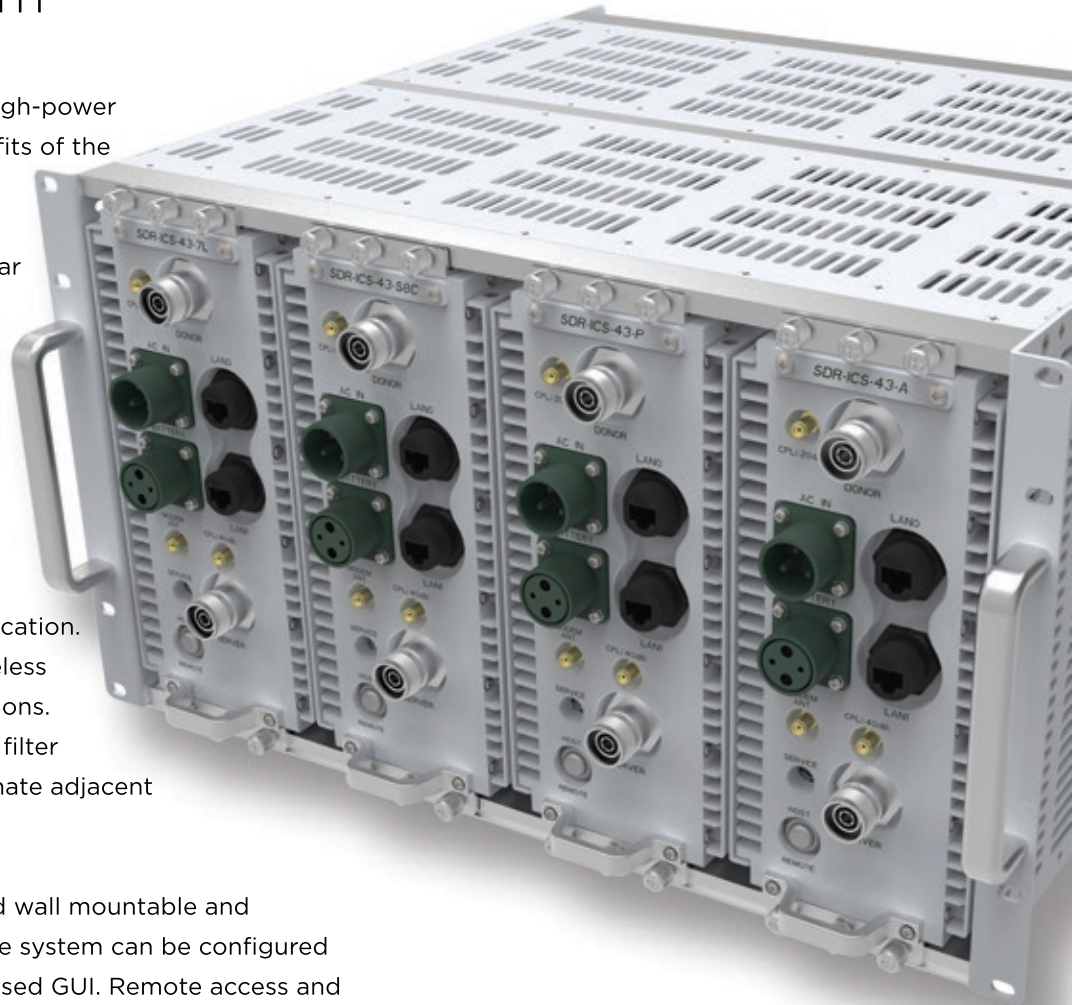
SDR-ICS-43

High Power Modular Digital Repeater with Interference Cancellation System

ADRF's SDR-ICS-43 is a revolutionary high-power digital repeater that combines the benefits of the most popular in-building repeater, SDR Series, and the best-in-class high-power outdoor repeater, ICS Series. The modular structure supports any combination of quad-band service in one body and each module is self-sufficient, making it the most flexible and cost-efficient high-power repeater solution.

The patented Interference Cancellation System makes it ideal for enhancing the coverage of any indoor or outdoor application. High gain and output power ensure wireless coverage in even the most remote locations. Through digital signal processing (DSP) filter technology, the SDR-ICS-43 helps eliminate adjacent channel interference.

The SDR-ICS-43 chassis is both rack and wall mountable and can be installed indoors or outdoors. 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 adjustments instantaneously.



Product Features

- Each module is a fully functional repeater with independent power supply
- Features patented Interference Cancellation System
- Each module is IP66 rated
- 95 dB of max gain and up to 43 dBm max composite output power
- Features digital filtering with sharp roll-off
- Band Equalization function supports multiple subchannels in single module
- Supports remote configuration and monitoring via ADRF's famed Web-based GUI and internal or external modem
- Daisy-chain multiple modules to configure/monitor from a single point of interface

Product Specifications

SDR-ICS-43 High Power Modular Digital Repeater with Interference Cancellation System



Electrical Specifications

		SDR-ICS-43-7FN	SDR-ICS-43-7L	SDR-ICS-43-7U	SDR-ICS-43-S8C	SDR-ICS-43-P	SDR-ICS-43-A	SDR-ICS-43-W	SDR-ICS-43-BT	
Frequency	DL: UL:	728 - 768MHz 698 - 716MHz 776 - 798MHz	728 - 746 MHz 698 - 716 MHz	746 - 757 MHz 776 - 787 MHz	862 - 894MHz 817 - 849MHz	1930 - 1995 MHz 1850 - 1915 MHz	2110 - 2155 MHz 1710 - 1755 MHz	2350 - 2360 MHz 2305 - 2315 MHz	2496 - 2690 MHz 2496 - 2690 MHz	
Band Selection per Filter (SDR and ICS Modes)		LTE: 5 - 20 MHz CDMA: 2.5 - 20 MHz WCDMA: 5 - 20 MHz	LTE: 5 - 20 MHz CDMA: 2.5 - 20 MHz WCDMA: 5 - 20 MHz	LTE: 5 - 20 MHz CDMA: 2.5 - 20 MHz WCDMA: 5 - 20 MHz	LTE: 5 - 20 MHz CDMA: 2.5 - 20 MHz WCDMA: 5 - 20 MHz	LTE: 5 - 20 MHz CDMA: 2.5 - 20 MHz WCDMA: 5 - 20 MHz	LTE: 5 - 20 MHz CDMA: 2.5 - 20 MHz WCDMA: 5 - 20 MHz	LTE: 5 - 20 MHz CDMA: 2.5 - 20 MHz WCDMA: 5 - 20 MHz	LTE/5G NR: 20/40/60 MHz	
Simultaneous Filter Support		ICS OFF: 3 ICS ON: 2	ICS OFF: 3 ICS ON: 2	ICS OFF: 3 ICS ON: 2	ICS OFF: 3 ICS ON: 2	ICS OFF: 3 ICS ON: 2	ICS OFF: 3 ICS ON: 2	ICS OFF: 3 ICS ON: 2	ICS OFF/ON: 1	
Gain Flatness (Full Band)		±1.5 dB	±1.5 dB	±1.5 dB	±1.5 dB	±1.5 dB	±1.5 dB	±1.5 dB	±2.0 dB	
Gain Flatness (Each Band)		±1.5 dB	±1.5 dB	±1.5 dB	±1.5 dB	±1.5 dB	±1.5 dB	±1.5 dB	±1.5 dB	
Gain Range		55 - 95 dB (Step - 0.5 dB) (Tolerance ±1 dB)								
Frequency Error		±0.05 ppm								
ALC Range		Max output power - 20 dB								
Spurious Emissions		Meet 3GPP 36.106, 3GPP TS 36.104, 3GPP TS 36.141								
Out Band Spurious Emissions		-13 dBm / 1 KHz; 9 KHz < f < 150 KHz -13 dBm / 10 KHz; 150 KHz < f < 30 MHz -13 dBm / 100 KHz; 30 MHz < f < 1 GHz -13 dBm / 1 MHz; 1 GHz < f < 12.75 GHz								
Composite Output Power	DL: UL:	+43 dBm +30 dBm								
Required Minimum Isolation		gain - 15 dB	gain - 15 dB	gain - 15 dB	gain - 15 dB	gain - 15 dB	gain - 15 dB	gain - 15dB	gain - 10 dB	
Roll Off		> 50 dBc @ 1 MHz Outside pass-band								
Noise Figure (UL)		≤ 5 dB @ 95 dB gain; ≤ 8 dB @ 73 dB gain; ≤ 12 dB @ 65 dB gain								
Delay		< 4 μs @ LTE	< 4μs @ LTE	< 4μs @ LTE	< 4μs @ LTE < 7.2μs @ CDMA	< 4μs @ LTE < 7.2μs @ CDMA	< 4μs @ LTE	< 4μs @ LTE	< 2.4μs @ 5G NR	
EVM		Meet 3GPP 36.106, 3GPP TS 36.104, 3GPP TS 36.141								
VSWR		1.5 : 1								
Remote Alarm / Network		Web-GUI, SNMP, SNMP-Traps								
AC Power		100 - 240V								
AC Frequency		45 - 65Hz								
AC Voltage Protection		Circuit Protector								
Battery Backup		+24V								
Power Consumption		< 250 W	< 250 W	< 250 W	< 250 W	< 250 W	< 250 W	< 250 W	< 236 W	

Environmental Specifications

Operating Temperature	-22°F to +131°F (-30°C to +55°C)
Relative Humidity	5 - 90%

Mechanical Specifications

Dimensions	
Chassis (W x H x D)	19.0 x 10.50 x 17.00 in (482 x 266.5 x 430 mm)
Module (W x H x D)	
7L/ 7U/ S8C/ PCS/ AWS/ WCS/ BT	4.18 x 10.34 x 17.73 in (106 x 262.5 x 450 mm)
7FN	5.28 x 10.34 x 17.73 in (134 x 262.5 x 450 mm)
Weight	
7L/ 7U/ S8C/ PCS/ AWS/ WCS/ BT	30.8 lbs (with Bracket) 14 kg
7FN	39.68 lbs (with Bracket) 18 kg
RF Ports	4.3-10 Female
Local Interface	RJ-45 (Ethernet)
Cooling	Fan
Weather Resistance	IP66
Mounting Type	19" Rack / Wall / Pole Mounting
Ground	External Threaded Stud

Web www.adrftech.com

Tel +1 818.840.8131 Fax +1 818.840.8138

Technical/Customer Support +1 800.313.9345

3116 West Vanowen Street Burbank, CA 91505



TL9000



THE SIGNAL FOR SUCCESS™