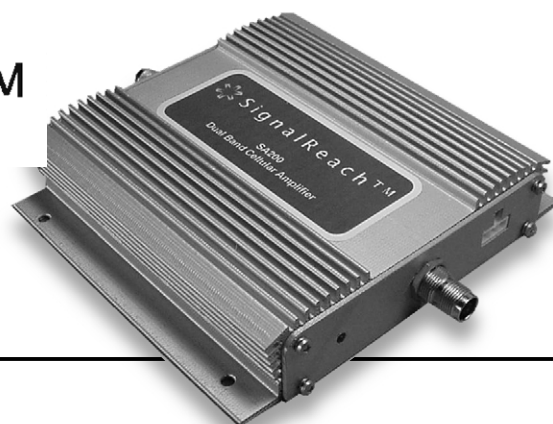




SA200 Dual Band Cellular Amplifier

AMPS PCS TDMA GSM CDMA



Description

The SignalReach™ SA200 Dual Band Cellular Amplifier provides amplification of transmit and receive signals for improved cellular communications. Designed for use with cellular tri-mode, dual band telephones, the signal amplifier reduces problems with signal fades and dropped calls while improving voice quality, service range and access. The signal amplifier enhances the performance of cradle-mounted cellular telephones, resulting in wider coverage, less signal fading in buildings in urban environments, and increased coverage when used in rural areas. This product is designed to operate for CDMA, TDMA and GSM mode signals from cellular service providers in the 824 to 894 MHz and 1850 to 1990 MHz (PCS) cellular bands. The amplifier is designed to work with a variety of cradles and hands-free systems in fixed or mobile applications.

This cellular signal amplifier is a network-compatible device that ensures proper power levels in the transmit (uplink) path. This enhances the cellular telephone user's experience without compromising cellular network inter-operability requirements. The amplifier receive circuitry is appropriately optimized for network operation.

Features

- Power control logic to ensure maximum output power is within cellular standards.
- Self-adjusting circuitry allows it to work with any cellular telephone/cradle combination.
- Network-compatible operation to ensure transmit power tracks the connected cellular telephone output.
- 3 Watts output (800 MHz band) with typical antenna.
- 2 Watts output (1900 MHz band) with typical dual band antenna.

RF Specifications

	Transmit	Receive
Frequency Range	824-849 MHz 1850-1910 MHz	869-894 MHz 1930-1990 MHz
Output Power	3 W @ 836.5 MHz typical 2 W @ 1880 MHz typical (ERP)	
Gain	6 dB to 18 dB, @ 836.5 MHz 6 dB to 15 dB, @ 1880 MHz	8 dB ± 3 dB @ 881 MHz 8 dB ± 3 dB @ 1960 MHz
Minimum Input for Maximum Output Power	32 mW (15 dBm) @ 836.5 MHz 35 mW (16 dBm) @ 1880 MHz	
Noise Figure		7dB max
Maximum Input Power	27 dBm (500 mW) all bands	-15 dBm (0.03 mW) all bands
VSWR (typical)	2:1	2:1

General Specifications

Power Requirements	10-24 V, 2 Amps maximum
Nominal Operating Temperature Range	-40 to +70 C (-40 to 158 F)
Dimensions	135mm L x 152mm W x 33mm H (5.31" L x 5.98" W x 1.30" H) without RF connectors
Net Weight	1.36 kg (3 lbs)
RF Connectors	TNC Female
Included Accessories	DC power cable with fuse, 1.5m (4 ft) RF cable w/ TNC ends, qty two (2) FME/TNC adapters
Optional Accessories	Accessory kits