Feature Sheet

SignalReach™

CR Series In-building Repeater

AMPS • PCS • TDMA • GSM • CDMA • iDEN

Description

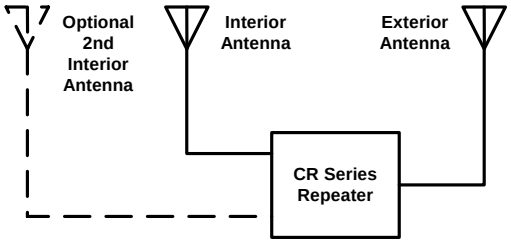
The SignalReach™ CR Series In-building Repeaters extend cellular and iDEN services into buildings and other poor coverage areas. The CR Series Repeaters are designed for use with cellular and iDEN telephones (850 and 1900 MHz, and iDEN band) and offer a cost-effective solution for small business and residential applications. The repeaters are useful in areas where cellular or iDEN service is available outside of the building and marginal indoors. The two-way radio functionality of cellular and iDEN telephones is preserved.

The repeaters are network-compatible devices that amplify cellular or iDEN signals in both the uplink and downlink directions. The repeaters are simple to install, and contains circuitry to ensure proper operating power levels, and as well, include automatic low isolation and detection circuitry that detects low isolation between the indoor and outdoor antennas. In this condition, the repeaters will adjust their gain to compensate for the abnormality, and warn the user through an indicator LED. The CR Series Repeaters will enhance the cellular or iDEN telephone user's experience while complying with cellular and iDEN network specifications. The repeaters will also work with wireless PDAs (Wireless Digital Assistants) and laptop personal computers with wireless PC cards. Linear operation is guaranteed under all conditions.

The CR Series Repeaters allow up to two indoor antennas to be used without the need of external components. Their auxiliary indoor antenna port allows a second indoor zone to be easily connected. The repeaters can be battery-backed, by connecting the repeaters' 12VDC supply to the spades of a rechargeable battery with the repeaters' optional battery back-up interface cable. The rechargeable battery is then permanently connected to the battery manufacturer's recommended trickle charger keeping the battery charged indefinitely, ready in the event of a building power failure.

Features

- Easy Installation – no calibration required,
- Up to 40,000 sq. ft. of free space coverage (with two interior antennas),
- Automatic Low Isolation Detection and Indication Circuitry,
- Feedback Overload Shutdown and Auto Start,
- Auto levelling circuitry ensures linear operation,
- Network-compatible operation,
- Auxiliary in-building antenna port provides enhanced coverage,
- FCC & Industry Canada approved,
- Can be connected to battery back-up system for emergency powering,
- Optional battery back-up interface cable available.



RF Specifications

	Specification	CR100 Cellular	CR300 iDEN	CR500 PCS		Specification	All Products
Up-link	**Frequency Range (MHz)**	824-849	806-825	1850-1910		**Low Isolation Detection**	An amber LED indicator will indicate low isolation between indoor and outdoor antennas.
	Output Power (dBm)	+23	+23	+23			
	Maximum Gain (dB)	60	60	60		**Maximum Possible Exposure (MPE)**	At the interior antenna port, exposure to non-ionizing radiation meets or exceeds the permissible FCC mandated MPE specification.
Down-link	**Frequency Range (MHz)**	869-894	851-870	1930-1990			
	Output Power (dBm)	+15	+15	+15		**Group Delay**	150 nS (Typical)
	Maximum Gain (dB)	60	60	60		**Gain Flatness**	+/- 3 dB
						Noise Figure	< 6 dB

General Specifications

Specification	All Products
Power Requirements	120V AC adapter included. (500mA @ 12V for CR100 and CR300, 1A @ 12V for CR500) For battery back-up, third party back-up system must be +12VDC, 8 Amp-Hours min (for 8 hours operation on battery)
Operating Temperature Range	-40 to +60°C (-40 to 140°F); indoor use only
Dimensions	165mm L x 152mm W x 33mm H (6.50" L x 5.98" W x 1.30" H) without RF connectors
Net Weight	1.36 kg (3 lbs)
RF Connectors	TNC Female
Recommended Indoor Antenna	3 dBi ceiling mount omni-directional
Recommended Outdoor Antenna	Directional Yagi
Included Accessories	120V AC adapter
Optional Accessories [1]	Battery back-up interface cable

[1] **Recommended exterior antenna cable types are indicated in the product's installation and user manual. An exterior directional antenna may be required in some cases where network coverage is weaker.**

For more Information Contact: sales@signalreach.com

SignalReach™
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