Data Sheet

SignalReach™

CR Series SOHO Cellular Repeater

AMPS • PCS • TDMA • GSM • CDMA• iDEN

Description

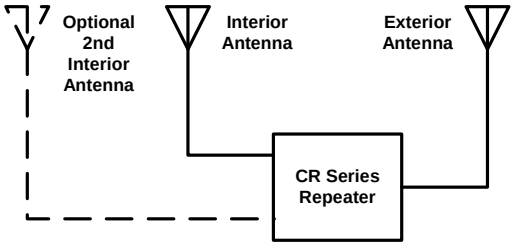
The SignalReach™ CR Series Small Office Home Office (SOHO) Cellular Repeaters extend cellular services into buildings and other poor coverage areas. The CR Series Repeaters are designed for use with cellular telephones (800 and 1900 MHz, and iDEN band) and offer a cost-effective solution for small business and residential applications. The repeaters are useful in areas where cellular service is available outside of the building and marginal indoors. The two-way radio functionality of cellular telephones is preserved.

The repeaters are network-compatible devices that amplify cellular 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 telephone user's experience while complying with cellular network specifications. 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 powered by their AC adapter or through the in-building antenna port using an optional power inserter.

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 approved,
- Optional power inserter available.



RF Specifications

	Product	CR100 Cellular	CR300 iDEN	CR500 PCS
Up-link	Frequency Range (MHz)	824-849	806-825	1850-1910
	Output Power (dBm)[1]	+23	+23	+23
	Maximum Gain (dB)	60	60	60
Down-link	Frequency Range (MHz)	869-894	851-870	1930-1990
	Output Power (dBm)[1]	+15	+15	+15
	Maximum Gain (dB)	60	60	60

All	
Low Isolation Detection	An amber LED indicator will indicate low isolation between indoor and outdoor antennas.
Maximum Possible Exposure (MPE)	At the interior antenna port, exposure to non-ionizing radiation meets or exceeds the permissible FCC mandated MPE specification.
Group Delay	< 200 nS

[1] **The RF output power specification is for a multi-carrier environment of up to three simultaneous TDMA carriers or one CDMA carrier.**

General Specifications

Product	All
Power Requirements	120V AC adapter included
Operating Temperature Range	-40 to +60°C (-40 to 128°F); indoor use only
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
Recommended Indoor Antenna	3 dBi ceiling mount omni-directional
Recommended Outdoor Antenna	2 dBi omni-directional
Included Accessories	120V AC adapter
Optional Accessories [2]	Power inserter, indoor and outdoor omni-directional antennas, 5m (16.25') low loss RF cable for the interior antenna interface

[2] **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

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