

# CR Series SOHO Cellular Repeater

AMPS • PCS • TDMA • GSM • CDMA • iDEN

## Description

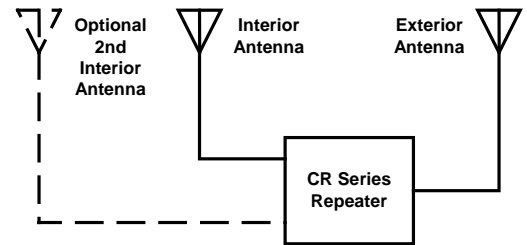
The SignalReach™ CR Series Small Office Home Office (SOHO) Cellular Repeaters extend cellular services into buildings and other poor coverage areas. The CR Series Repeaters are designed for use with cellular telephones (800 and 1900 MHz, and iDEN band) and offer a cost-effective solution for small business 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 warning 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<br>Cellular | CR300<br>iDEN | CR500<br>PCS | All                                    |   |
|-----------|---------------------------------|-------------------|---------------|--------------|--|---|
| Up-link   | Frequency Range (MHz)           | 824-849           | 806-825       | 1850-1910    | <b>Low Isolation Detection</b>         | An LED indicator will indicate low isolation between indoor and outdoor antennas. |
|           | Output Power (dBm) <sup>1</sup> | +20               | +20           | +20          | <b>Maximum Possible Exposure (MPE)</b> | Meets or exceeds the permissible FCC mandated MPE specification.                  |
|           | Maximum Gain (dB)               | 60                | 60            | 60           |  |   |
| Down-link | Frequency Range (MHz)           | 869-894           | 851-870       | 1930-1990    | <b>Group Delay</b>                     | < 200 nS  |
|           | Output Power (dBm) <sup>1</sup> | +15               | +15           | +15          |  |   |
|           | Maximum Gain (dB)               | 60                | 60            | 60           |  |   |

<sup>1</sup> 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   |
| Outdoor Antenna                   | Not to exceed 18dBi  |
| Indoor Antenna                    | Not to exceed 9 dBi  |
| Included Accessories <sup>2</sup> | 120V AC adapter  |

For more Information Contact: [sales@signalreach.com](mailto:sales@signalreach.com)

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