



Spotwave brings the outdoor signal inside – giving you clear voice call quality and high speed data rates

## Product Benefits

- Improves coverage for any CDMA carrier in North America
- Clear voice calls and longer battery life for your phones and PDAs
- Improved data throughput speeds for broadband subscribers
- The ability to cut the cord and go completely wireless at home
- Reliable connectivity equals more mobility, accessibility and increased productivity

## Overview

Spotwave's carrier-approved, SpotCell® 250 is a high-performance dual band repeater system which boosts wireless signals and ensures reliable coverage for cell phones, PDAs and 3G laptop air cards where they are used more often - indoors.

Geared for smaller commercial facilities and residential spaces, the SpotCell® 250 is configurable to support specific wireless voice and data services (CDMA, 1xRTT, GSM, EDGE, UTMA, HSPA and EVDO) being delivered in the Cellular and PCS bands (850 MHz and 1900 MHz). Provides coverage up to a maximum of 5,000 sq ft per system.

## An Effective Solution for Residences or Small Business

Spotwave quickly overcomes barriers to coverage by the use of smart antennas, which consists of an outdoor Donor Unit that communicates with the cell tower and an indoor Coverage Unit which retransmits the signal to the handsets inside the building. Both units are connected via coaxial cable which allows the two units to communicate back and forth seamlessly.

## Supporting CDMA Networks for Today and Tomorrow

The SpotCell® 250 provides enhanced coverage for both dual bands in CDMA cellular and PCS networks, cost-effectively improving indoor coverage for voice and data services.

## Powered by Network Protecting SpotCell® Technology

Spotwave has combined smart antenna technology and advanced adaptive algorithms - creating the only truly intelligent indoor wireless coverage systems available on the market. This unique adaptive capability of SpotCell® products reduces much of the engineering effort associated with conventional coverage approaches. Once the system is installed, it automatically adjusts performance according to network signals and isolation - no costly maintenance or adjustments are required.

Unlike other products on the market, each SpotCell® system is programmed for a specific carrier frequency - ensuring the highest possible signal performance while protecting carrier networks and other wireless devices from interference.

## Everything You Need

Our systems come complete with everything required for rapid deployment including cable and mounting hardware.



Coverage area indicated is based on typical building characteristics and are not guaranteed. Coverage area will be determined by multiple factors including strength of signal received from the carrier network, construction materials, and location of Spotwave equipment.

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## Powered by SpotCell® Technology

- Adapts real-time to changing network conditions - providing consistent coverage area and optimum performance
- Spotwave's built-in Auto Trac™ LEDs guide proper alignment to the base station
- Guaranteed to protect carrier signal integrity as the network evolves

## Our System Includes

- Coverage Unit
- Donor Unit
- RF Cable
- Mounting Hardware
- Power Supply
- On-Board Diagnostics
- Quick Install Guide

Toll-Free in North America  
 1-866-492-0802

Telephone  
 1-613-591-1662

Email  
 info@spotwave.com

Web  
 www.spotwave.com

## System Specifications and Performance

	Cellular	PCS
Frequency Band	UL: 824 - 849 MHz DL: 869 - 894 MHz	UL: 1850 - 1910 MHz DL: 1930 - 1990 MHz
Operator sub-bands	Operator Specific	
Primary sub-band	A+A'+A'' or B+B'	5, 10, 15 MHz
Formats Supported	CDMA, 1XRTT, EVDO, GSM, EDGE, UTMA, HSPA	
Maximum Coverage Area (max input signal, open area with no obstructions)	5,000 sq ft (460 m <sup>2</sup> )	
System Gain (fully adaptive, includes antenna)	UL: 0 to +70 dB maximum DL: 0 to +70 dB maximum	
System Stability Margin	> 10 dB (fully adaptive)	
Downlink Operating Range (receive isotropic power)	-95 to -45 dBm	
Maximum Input Level (receive isotropic power)	UL: -10 dBm maximum DL: -45 dBm maximum	
Output Level – EIRP (fully adaptive)	UL: +30 dBm maximum (composite) DL: -5 dBm maximum (composite)	
Third Order Intercept (EIRP, radiated)	UL: +53 dBm DL: +15 dBm	UL: +50 dBm DL: +15 dBm
Power Consumption	< 45 W	

## Physical

	Donor Unit	Coverage Unit
Operating Temperature	-40° to 131°F (-40° to 55°C)	32° to 104°F (0° to 40°C)
Size (wxhxd)	14 x 12.5 x 3 in (36 x 31.5 x 8 cm)	3 x 6.5 x 1.5 in ( 7.6 x 16.5 x 3.8 cm)
Weight	12 lbs (5.5 kg)	1 lbs (0.5 kg)
RF Connectors	Type F: Coverage Port (weatherproof)	Type F: Donor Port
RF Cable	Supports up to 82 ft (25m) RG-6 cable between Donor and Coverage Units Optional 165 ft (50m) RG-11 cable between Donor and Coverage Units	
Power Supply	Universal power adapter (90 - 260 VAC, 47 - 63 Hz)	

## Installation

Donor Unit Alignment	No prior knowledge of base station location required Built-in alignment algorithm (Auto-Trac LED indicator on Donor Unit)
Test Equipment	None required, easy-to-read LED indicators guide installation
User Controls	None, setup and operation fully automatic

## Indicators and Diagnostics

User Interface	Power LED on Coverage Unit Built-in signal strength display on Donor Unit
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