NEXTIVITY CEL-FI RS2 DUAL BAND

CEL FI RS2 Multi-Carrier Cellular Indoor Coverage

The Next Generation...

Nextivity's second generation Cel-Fi RS-2 is a cost- effective and intelligent Indoor Coverage Solution for WCDMA/HSPA+, designed to dramatically increase indoor voice quality and data throughput for 3G consumers while significantly improving network capacity for Mobile Operators, Small Businesses and MVNOs.

Breakthrough, patented technology enables a wireless, indoor, plug-and-play, user installable coverage solution that's so "no-touch" easy to use it obviates the need for support calls to the Operator's Help Desk.

BENEFIT TO CONSUMERS

Improved Voice Coverage: Enables clear and reliable 3G voice connections within the coverage area — usually up to 1235 m2 (13,000 Sq. Ft.).

Improved Data Throughput: For indoor areas with poor reception, Cel-Fi offers significant data throughput improvements — often in excess of four times the current rate!

Improved Battery Life: Cel-Fi manages the power levels between the cell tower and user devices so that subscriber devices enjoy significant improvements in battery life.

Ease of Installation: Cel-Fi is a true "Plug and Play" system that doesn't require the installation of external antennas, bulky coaxial cables or a configuration set-up by the subscriber. In fact, Cel-Fi intelligently and automatically senses and adapts to its environment — including changes made by the Operator or those caused by nearby user equipment like WiFi, or other Cel-Fi devices.

BENEFIT TO OPERATORS

Reduced Churn:
Fewer dropped calls and higher data rates help ensure customer retention.

Higher Data Service Usage:
By supporting advanced multi-carrier features, the second generation Cel-Fi system ensures that customers can maximize their data rates.

Decreased Operational Cost:
Lowers cost of indoor coverage and increases capacity of 3G networks.

Network Safe:
Cel-Fi's embedded System-On-a-Chip technology provides real-time and automatic end-to-end gain control, thus guaranteeing it will complement the existing macro network's capabilities.

Operator Specific:
Cel-Fi's On-Board IntelliBoost processor securely manages the enhanced services only for the Operator who authorized the system.

Self Adjusting:
Cel-Fi automatically selects the correct frequencies for use based on UARFCN and Operator PLMNID codes, thereby eliminating additional and costly Operator provisioning efforts.

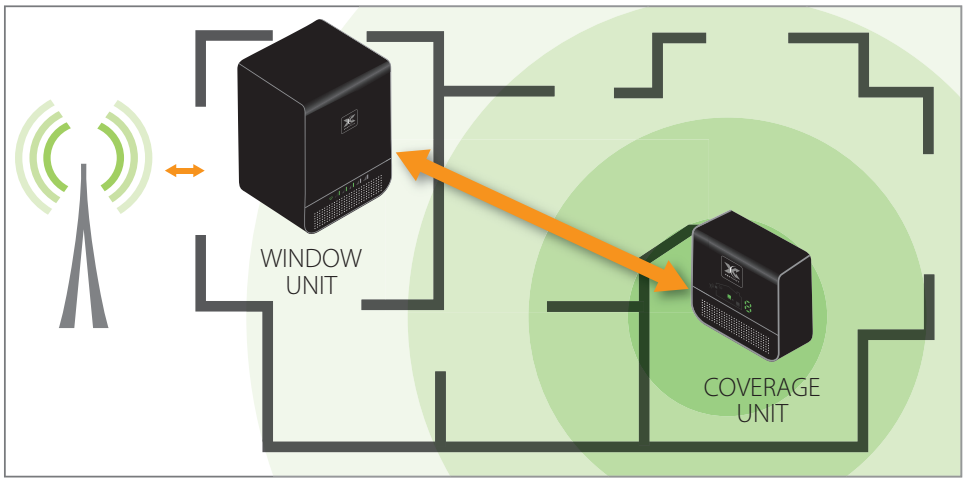
Multi Carrier Support:
The Cel-Fi RS2 system supports multiple carriers (up to three simultaneous) across two bands.

Cel-Fi Features

- Fully wireless, plug-and-play architecture for supporting band I and VIII or band II and V—WCDMA/HSPA+ with up to 100dB of system gain.
- Patented 2-unit, 3-hop system allows flexible placement for optimal coverage.
- Processor running advanced digital echo cancellation and channel select filtering algorithm.
- Software-based optimization of integrated antenna coverage pattern which maximizes system gain and provides improved coverage and signal quality.
- Automatic Gain Control (AGC) continuously monitors system path loss and transmit power to deliver maximum gain.
- Intuitive LED User Interface (UI) allows quick and easy installation by end-user.

Network-Safe Features

- Securely provisioned operation with ciphered software which only operates on authorized Operator's network.
- Network-Safe software prevents uplink system gain from exceeding path loss, and eliminates unnecessary rise in base station noise level.
- Uplink Muting Mode automatically shuts down uplink cellular transmissions when no active user equipment is detected.
- Embedded software ensures optimal performance and prevents out-of-specification operation.
- System shuts down upon Operator's network command or failure detection.
- Maintains end-to-end cellular communication encryption without additional risk of vulnerability.
- Peaceful coexistence with adjacent Cel-Fi systems, 802.11a/b/g/n, cellular, and femtocell devices.



Processor

- Nextivity's IntelliBoost Baseband Processor II

High-Level Specifications

- Support for 3GPP Rel. 8 features
- 5 GHz link compliant with ETSI EN301 893 V1.5.1
- Up to 100dB path loss between units (approx. 20 meters between WU and CU)
- Max Band 1 and 2 EIRP for 3 carriers: 14.7 dBm downlink & 26.2 dBm uplink
- Max Band 5 and 8 EIRP for 3 carriers: 12.7 dBm downlink & 23.2 dBm uplink
- Up to 100 dB system gain
- Availability greater than 99.9%

Specifications

WINDOW UNIT

199MM (7.83")H
144MM (5.67")W
147MM (5.79")D
Weight: 0.86kg (1.9lbs.)

COVERAGE UNIT

158.5MM (6.24")H
146MM (5.75")W
59MM (2.32")D
Weight: 0.39kg (.81lbs.)

ENVIRONMENT

- Operating temperature: 0° to 40°C
- Storage temperature: -25° to 60°C
- Relative humidity: 5 to 95%, noncondensing
- Operating altitude: -60m to 3,050m
- Storage altitude: 12,000m
- RoHS (2002/95/EC) six of six compliant
- WEEE (2002/96/EC)

3GPP COMPLIANCE

- 3GPP TS 25.143 Rel.8

SAFETY

- EN60950-1:2005 +A1:2010
- EN62311:2008 1999/519/EC EMF
- UL/CS 60950-1 2005 2nd ED

EMC/EMI/IMMUNITY

- EN55022 Class B
- EN61000-3-2, 3
- EN61000-4-2~6,11
- EN 301 489 -1,17, 23
- EN 301 893 V1.5.1
- EN 301 908-1,11

POWER

- 12 VDC via external supply (2 included)
- External supply: 100 to 240 VAC, 47 – 63 Hz.
- Power consumption less than 17W per unit

CERTIFICATIONS

- CE Mark
- CB Mark
- UL Mark (RS225)

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