

Cel-Fi QUATRA 4000e™ Enterprise Cellular

5G/4G/3G Smart Signal Booster®



Performance Leadership

Ease of Install

Leaders in Value

Fast Set Up

Carrier Grade Approval

Multi-Carrier Hybrid Active DAS for 5G/4G/3G Voice & Data

Spotty cellular coverage, poor voice quality, dropped calls, and dead zones continue to plague employees and visitors in enterprise buildings. To solve that problem, Cel-Fi QUATRA 4000e is an affordable, all-digital active DAS hybrid solution that provides uniform, high-quality cellular signal throughout any building. This industry-leading system is also carrier approved and guaranteed network safe.

The system utilizes data cabling for RF and Power over Ethernet, with no signal attenuation to the Coverage Unit (CU) embedded service antennas. In addition to being the most powerful solution on the market, QUATRA is cost-effective and designed to be installed within days (compared to months typical of other solutions).

Perfect for creating the ideal system, Cel-Fi QUATRA 4000e is scalable to fit buildings of all sizes. Depending on the environment, size, and space, the system utilizes one or multiple Network Units (NUs), with each one providing power and distributing signal for up to six CUs. Together, the NUs and CUs support 4 operators simultaneously.

IntelliBoost® Chipset

The Nextivity IntelliBoost® baseband processor is the first six-core processor designed specifically to optimize the indoor transmission and reception of 5G/4G/3G wireless signals. With advanced filtering, equalization, and echo-cancellation techniques, Nextivity has developed an architecture that delivers unprecedented in-building data rates and pervasive 5G/4G/3G connectivity. The IntelliBoost® processor ensures that Cel-Fi products never negatively impact the macro network while providing maximum coverage.

Network Unit (NU)



MODEL NUMBERS

QUATRA 4000e
NU: Q44-E999CNU
CU: Q41-EECU
Bands: 1/3/7/8/20/40



Coverage Unit (CU)

Fiber Range Extender



Up to 100 dB Max Gain for 5G/4G/3G Voice and Data



All Digital

Data Cabling PoE/RFoE Solution



Scalable

Up to 12,000 m2 Coverage per Network Unit



Multi Mode:

Off-Air or SuperCell Mode with Fiber Expansion



Network Safe

Carrier Approved with No Noise Guarantee



Cel-Fi WAVE Platform

Set Up, Remote Monitoring, and Management

Cel-Fi QUATRA 4000e™ Enterprise Cellular

Cel-Fi QUATRA is designed to be scalable for installers.

Cel-Fi Wave Compatibility

Providing control and optimization insight, the Cel-Fi WAVE Portal is a web-based platform that enables an operator or integrator to remotely monitor equipment and network KPI's, such as channel configurations, RSRP, RSRQ, SINR, and system gains.

Network Safe

All Cel-Fi systems employ self-organizing edge intelligence to constantly monitor power levels and donor-to-server antenna RF feedback with active echo cancellation. This automatically ensures maximum coverage power without interfering with operator networks and other local radio systems.

Off-Air Configuration

QUATRA systems are capable of retransmitting donor signals from outdoor directional antennas to indoor locations. Unlike typical BDA amplifiers, each operator channel is individually processed and power controlled to achieve full coverage power. This eliminates channel-to-channel coverage power variations due to differences in power of donor signals.

Supercell® Configuration

A Supercell is comprised of a Cel-Fi QUATRA system connected to a small cell. Multiple Cel-Fi QUATRA systems can be connected to a single small cell, or multiple small cells, to form a Supercell. A Supercell with Cel-Fi QUATRA is more efficient than multiple small cells, and the CUs of a Cel-Fi QUATRA system connected to a Supercell do not interfere with one another.

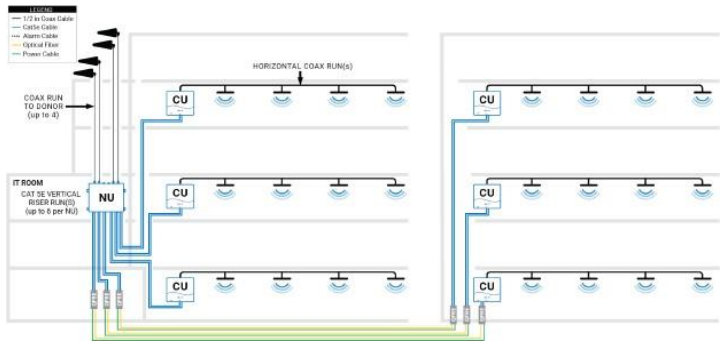
Fiber Extension

Expanding the capabilities of Cel-Fi QUATRA systems, the Cel-Fi QUATRA Fiber Range Extender (QFRE) increases the distance between the Network Unit and Coverage Unit up to 2.0 km (1.24 miles). This solution is ideal for high-rise structures, long distances, or multi-building facilities.

Networks



TWO-BUILDING DIAGRAM: 1 NU to 6 CUs with QUATRA Fiber Range Extenders



Accessories

Cel-Fi QUATRA 4000 Range Extender



Cel-Fi QUATRA Fiber Range Extender



Example Antennas



Cel-Fi Blade Antenna



Cel-Fi LPDA-R High-Gain Directional Antenna



Cel-Fi Low-Profile Antenna

Software



Cel-Fi WAVE Management Portal
cel-fi.com/software