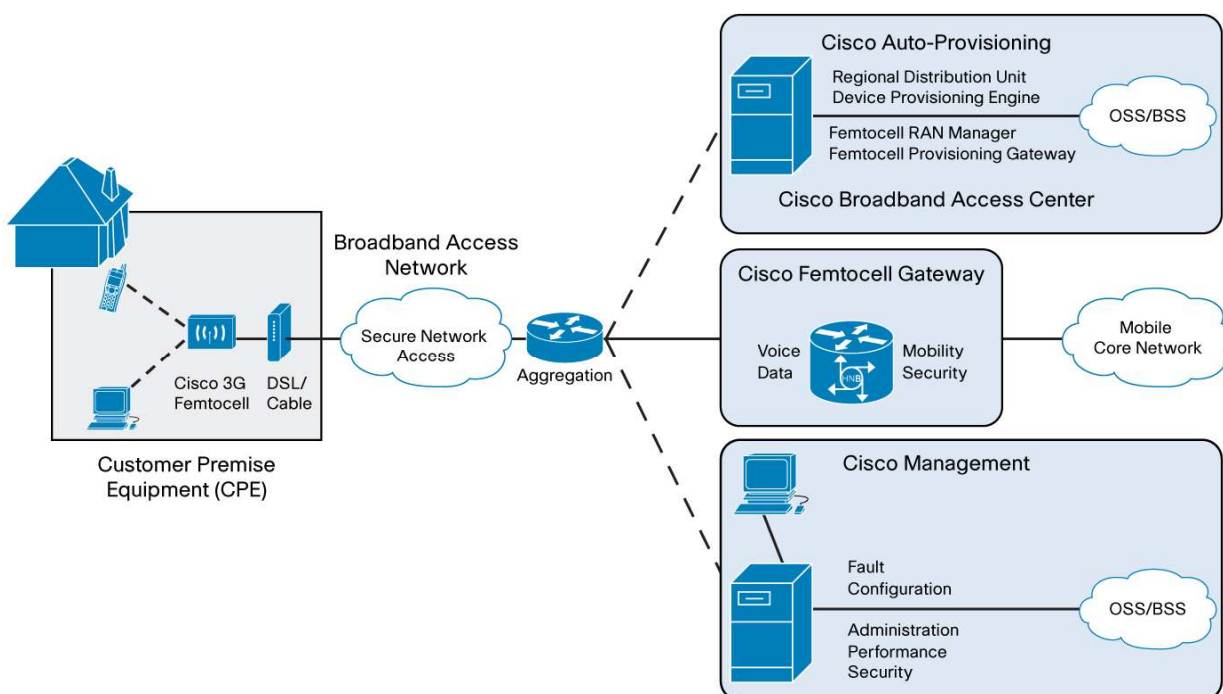# Cisco 3G Femtocell

Product Overview

The Cisco® 3G Femtocell is part of the end-to-end Cisco Femtocell Solution (Figure 1), offering mobile operators a network extension for delivering an integrated mobile multimedia experience. The Cisco Femtocell Solution offers high data throughput and easy service management, enabling new, high-margin mobile multimedia and unified communications services.

Figure 1.   Cisco Femtocell Solution

The Cisco 3G Femtocell (Figure 2) is an in-building mini cell tower. It carries the 3G signal inside a home or office, providing cellular voice and data service for up to four simultaneous callers within a coverage area of 5000 square feet. This device is a standalone unit with dual Ethernet interfaces to the user's broadband connection and home LAN. The Cisco 3G Femtocell runs in licensed spectrum and is fully managed by the operator, so the network is secure and controlled. The Cisco 3G Femtocell plays the Home Node B (HNB) role in the network as defined by the 3rd Generation Partnership Project (3GPP) femtocell architecture standard in Release 8.

Figure 2.   Cisco 3G Femtocell

Cisco 3G Femtocell Features and Benefits

Benefits

- **Superior indoor signal strength and coverage:** The femtocell dramatically increases signal strength throughout the home or office, resulting in excellent voice quality and call clarity, and consistent connectivity
- **High data speeds for an enhanced multimedia experience:** By providing customers with their own personalized femtocell base station, operators can support data throughput speeds on mobile devices that rival the speeds on home computers
- **Simplicity:** Subscribers can use their existing mobile phones and can access a straightforward interface to set up user profiles
- **Convenience:** Standards-based, zero-touch provisioning simplifies and accelerates deployment, allowing end users to "plug and play"
- **Self-optimization** tied to backend network intelligence helps operators easily manage millions of devices so they don't cause interference with neighboring femtocells, picocells, and macrocell towers
- **New Femtozone services:** Enables next-generation services such as mobile control of home networks

Features

- High-performance 3G voice and data, with 3GPP W-CDMA standard air interface
- Service prioritization for 3G users
- Up to four simultaneous voice or data sessions
- White list support for multiple users per account
- Approximate 5000 square foot coverage footprint
- E911 support
- Adaptive Multi-Rate (AMR) voice quality
- Integrated GPS functionality
- Hand-in and hand-out support with macro network
- Automatic configuration and provisioning
- Front-panel LEDs for operational status and simplified troubleshooting

Product Specifications

Table 1 summarizes the product specifications for the Cisco 3G Femtocell.

Table 1.   Product Specifications

Title	Specification
Front panel indicators	Power, Ethernet, GPS, PC, 3G
GPS antenna extender	Optional external GPS antenna input
Ethernet connection	RJ-45, WAN connection with broadband modem
PC connection	RJ-45, LAN connection with PC or network router
Reboot button	Restarts device initialization and authentication
UMTS bands	1900 MHz and 850 MHz (Bands 2 and 5)
Output power	5mW
HSDPA aggregate throughput	Up to 3.6 Mbps
AC power adapter	Input: 90–120VAC; Maximum output: 12V, 1.67A, 20W
Temperature range	0°to 45°C (32°to 113°F)
Dimensions	7.0 in x 8.0 in. x 2.0 in.
Weight	1.0 lb

Ordering Information

To place an order, visit the Cisco Ordering Home Page.

Table 2.   Ordering Information

Product Name	Part Number
3G Femtocell	4026383
Optional External GPS Antenna Extension – 25 feet	4031469

Note: The external GPS antenna extender is an optional device that may be needed to provide access to GPS signals when the Cisco 3G Femtocell is installed in a windowless room or closet.

Cisco Services

The Cisco Femtocell Solution is delivered by Cisco Services, an organization with unparalleled experience and expertise implementing large commercial femtocell deployments, and providing world-class systems service integration. With specialized tools, knowledge, methodologies, best practices, and a collaborative delivery model that combines Cisco's expertise with our partners' and customers' capabilities, Cisco Services achieves superior results. We help service providers to mitigate risk, accelerate time to market for new revenue-generating services, lower total cost of ownership, maximize the value of investments, and improve the customer experience through service assurance.

The Cisco Services team delivers comprehensive support, encompassing the service provider's entire network lifecycle. Through a lifecycle approach to services, Cisco has developed consistent and proven methodologies to help service providers successfully design and deliver new service offerings. These services are customized to operator needs and are delivered through an extensive global support infrastructure, which includes Cisco's award-winning Technical Assistance Center (TAC), Cisco Services resources, Centers of Excellence, Femtocell IOT/SVT labs, and ecosystem partners.

For More Information

For more information about the Cisco 3G Femtocell, visit http://www.cisco.com/go/femto or contact your local account representative.