



HSL 2.75G Femtocell

GSM/GPRS/EDGE

The HSL 2.75G Femtocell creates new opportunities for mobile network operators including improvements to the quality of the subscriber experience, the opportunity for new services, lower CAPEX and OPEX, increased operator revenues and cheaper calls for subscribers. The addition of femtocell infrastructure to an existing network, or as part of a new network build, need not be a demanding process. The HSL 2.75G Femtocell has been designed with this in mind and is therefore simple to deploy and manage.

The HSL 2.75G Femtocell is targeted for use by all GSM network operators, and is suited for use in both residential and office environments. With support for GSM, GPRS and EDGE the femtocell enables network operators to provide their subscribers with excellent quality voice and messaging but also fast mobile data to compliment the subscriber's existing wireless broadband (Wi-Fi).

GSM in its 2G form is the most dominant and widely available mobile technology in the world. The HSL

2.75G Femtocell enables an operator to focus on revenue opportunities and cost reductions available from both its 2G subscriber base as well as its 3G subscriber base. 3G subscribers are able to use the HSL 2.75G Femtocell through 2G support within 3G handsets.

The dual technology capability (2G+3G) within mobile handsets is not mirrored in 3G femtocells which typically do not support 2G handsets, and thus exclude the 2G subscriber base. The HSL 2.75G Femtocell allows network operators to support both their dominant 2G subscriber base and also their growing 3G subscriber base.

The HSL 2.75G Femtocell provides a secure GSM experience and conforms to 3GPP specifications in terms of security, services and operation. The femtocell is securely connected back into the mobile operator's own core network using IPsec, ensuring communications privacy between the femtocell and operator.

Datasheet

HSL 2.75G FEMTOCELL TECHNICAL SPECIFICATIONS

INTERFACES

GSM. Integrated radio base station module.

LAN. Ethernet: 100BaseT. IEEE 802.3u.

GSM/GPRS/EDGE

Based on 3GPP Rel 7.

Frequency band. GSM 1800 (1800). GSM 900 (900).

Macro network sync. GSM 1800 (1800). GSM 900 (900).

Tx. 1805-1880 MHz (1800). 925-960 MHz (900).

Rx. 1710-1785 MHz (1800). 880-915 MHz (900).

Number of timeslots. 8, of which 7 used for speech and/or data traffic and 1 for dedicated signaling.

Voice calls. 14 simultaneous.

Output power. Up to 200mW (23dBm)

Receiver sensitivity. -95 dBm.

Speech. FR, HR, AMR.

Data. GPRS CS1-4. EDGE MCS1-9.

SECURITY

GSM. Air encryption A5/0, A5/1, A5/3 (planned).

WAN. IPsec tunnel termination for GSM and O&M traffic. IKEv1 support.

CONFIGURATION AND MANAGEMENT

TR-069 for large-scale deployment. 3GPP O&M.

ANTENNAS

GSM. One antenna. Support for the GSM 1800 band (1800). Support for the GSM 900 band (900).

GPS. Connector for external antenna. Optional.

POWER SUPPLY

Power supply through external power adaptor. External AC/DC adaptor 100—240 VAC @ 50/60 Hz up to 12VDC 2A.

Compatible for use with external PoE (IEEE802.3at).

VISUAL STATUS INDICATORS

Front panel LEDs for power, network and activity.

Port LEDs for Ethernet LAN.

USER CONTROLS

Thru-hole reset switch.

COMPLIANCE & REGULATORY APPROVALS (CE)

EMC and radio spectrum standards.

EN 301 489-1 V1.8.1:2008

EN 301 489-8 V1.2.1:2002

EN 301 502 V8.1.2:2001

Safety standards.

EN 60950-1:2006 + A11:2009

EN 50383:2002

EU directives.

73/23/EEC, Low Voltage Directive (LVD)

89/336/EEC, Electro-Magnetic Compatibility Directive (EMC).

1999/5/EC, Radio and Telecommunications Terminal Equipment Directive (R&TTE), CE

2002/95/EC, Restrictions of Hazardous Substances Directive (RoHs)

2002/96/EC, Waste Electrical and Electronic Equipment Directive (WEEE)

HARDWARE

Material. Plastic.

Placement. Desktop.

HxWxD. 147 x 176 x 58 mm.

Weight. 473g unpacked.

ENVIRONMENTAL

Operating temperature. 0°C to +40°C

Operating environment. Indoors residential and office.

Operating humidity. 5%-90% non-condensing

(1800) denotes the 1800MHz model HGFMA-B. (900) denotes the 900MHz model expected to be available 2010. Specification subject to alteration without prior notice.

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Datasheet

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Rev. 201007-01

