

LTE Enterprise Small cell



Small cells are essential to deliver the high speed data networks required in the future. An LTE Small cell provides perfect LTE network coverage inside the enterprise.

node H

Zero-touch configuration, fully secure and remotely managed, the Node-H LTE small cell adapts dynamically to the environment to tune performance to be the best it can be.

Node-H software offers the best cost-performance for LTE femtocells. Small cells have a big future – with Node-H software you can enter the market with confidence.

Product Brief

VOICE CALLS

CSFB	Circuit switched fallback to 3G
VoLTE	Voice over LTE

LTE SERVICES

Fully scalable in software, existing hardware platform support:

LTE Modes	LTE-FDD, LTE-TDD
Active Users	32
Data Rates	Up to 150 Mbps/50Mbps in FDD
Bandwidth	5, 10, 15, 20MHz, with MIMO

MOBILITY

Femto to Macro	LTE hand-out, Inter-RAT hand-out to 2G, 3G, CSGB
Femto to Femto	Intra-LTE handover
Macro to Femto	LTE hand-in

FEATURE SUPPORT

CMAS	Commercial Mobile Alert System
ETWS	Earthquake and Tsunami Warning System
Access Control	Open, Closed Access, Closed Subscriber Group (CSG).
Synchronization	Network sniff, NTP/PTP, GPS (if supported)
Location locking	Radio Environment Measurement of sniffed cell IDs, IP address (requires Stun server) available for location lock.

HARDWARE

Bands	Software supports all bands
Chipset	Qualcomm FSM9016
Power supply	POE+ and DC supply

OPERATIONS AND MAINTENANCE

TR-069/TR-196v2	Full data model support including: Automatic parameter selection Performance metrics, Error reporting Complete dual-bank software update
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INTERFACES

Network	S1 or S1-Flex, X2
Air	Uu LTE Air Interface

QOS

Uplink	DSCP marking
Downlink	Scheduling by traffic priority, Dynamic RAB management

PROTOCOL COMPLIANCE

E-UTRA	3GPP LTE-Uu interface for LTE-FDD phys. layer
UEs	Tested with UEs from available Releases
LTE-Uu interface	Release 11 specifications RRC – 3GPP TS 36.331 RLC – 3GPP TS 36.322 MAC – 3GPP TS 36.321 PDCP – 3GPP TS 36.323 PWS – 3GPP TS 22.268
RAN over S1	Release 11 specifications Ethernet – IEEE 802.3 IPv4 – IETF RFC 791 UDP – IETF RFC 768 SCTP – IETF RFC 4960 S1AP – 3GPP TS 36.413 X2AP – 3GPP TS 36.423 eGTP – 3GPP TS 29.274

SON, RADIO RESOURCE MANAGEMENT

SON	S1 automatic discovery and configuration Automatic Neighbour Relations Automatic PCI selection Automatic power settings configuration Mobility Robustness Optimization
RRM	Dynamic bearer admission, rejection, redirection and reallocation Delay-, QOS- and interference-aware packet scheduler Inter-cell Interference Coordination (ICIC)

SECURITY

IPSEC security	Hardware acceleration, IKE v2 key management, AES, certificate-based security
Uu interface	Ciphering with hardware acceleration, Signaling integrity checking
Secure boot	Trusted platform fully secure start-up and code-signing

Features and Specifications are subject to change.



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