**LTE Enterprise
Small cell**

nodeH

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.

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, depending on hardware design.
Bandwidth	3, 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	LTE, 3G, 2G (dependent upon Sniff hardware support) and NTP/PTP
Location locking	Radio Environment Measurement of LTE, 3G and 2G cell IDs, IP address available for location lock.

HARDWARE

Bands	Software supports all bands
Chipset	Broadcom 61755, 61765 Dual-cell

OPERATIONS AND MAINTENANCE

TR-069	Partner provided solution from AVSystem
TR-196v2	Full data model support including:
	Automatic parameter selection
	Performance metrics, Error reporting
	Complete dual-bank software update

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 and LTE-TDD phys. layer
UEs	Tested with Release 8, 9 and 10 UEs
LTE-Uu interface	Release 9 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 10 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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