ip||access

The S60 4G small cell is a cost-effective solution for LTE coverage and capacity in enterprise environments, using IP backhaul for rapid deployment by the end-user

S60 nanoLTE®

4G SoHo Access Point
for small enterprises

4G
SOLUTION

The S60 Access Point

The S60 AP is a cost optimised indoor LTE small cell, targeted at enterprise environments such as small offices, home offices, retailers, and public spaces.

The S60 delivers 4G coverage and capacity into mass-market environments, and can be installed directly by end users in an unmanaged deployment.

With up to 150/50 Mbps LTE FDD performance, the S60 supports up to 32 active 4G users, depending on the product variant.

Fully self-configuring, the S60 can be mailed out to end users, and simply requires power and ethernet to be connected for a plug-and-play installation experience. ip.access' proven Self Organising Network (SON) and Network Listen features have already been used for deployments approaching 1.5 million small cells worldwide.

The S60 AP has single band FDD LTE support, covering all major global markets. The S60 also incorporates ip.access' innovative SUMO™ technology, allowing a single S60 to provide coverage for multiple operators.

Full mobility is provided between the S60 AP and neighbouring 4G, 3G and 2G cells, allowing seamless handover of calls to or from the macro network. Voice calls are supported with VoLTE, or using CSFB to offload voice service to 3G or 2G macro network.

The S60 is housed in a compact all-plastic enclosure with internal antennas, which can be desk, wall or ceiling mounted.

Viper™ virtualised enterprise RAN platform

The S60 is part of ip.access' Viper end-to-end small cell platform for enterprise RAN, which integrates the following components:

— A range of plug-and-play 2G, 3G and 4G small cell Access Points for small, medium and large enterprise deployments

— Virtualised Gateways which securely handle and route all traffic between the APs and the operator's core network

— SUMO™ Multi-Operator technology, allowing a single access point to provide coverage for all networks

— As A Service deployment models, including core network integration, AP deployment, and network operation.

S60 nanoLTE AP

S-class SoHo access points can be deployed by end-users as easily as a Wi-Fi router, cutting costs and simplifying the small cell rollout process.

ip.access

S60 nanoLTE Access Point

LTE radio

2 x 2 MIMO, 50mW per port
3 / 5 / 10 / 15 / 20 MHz channel bandwidths
Internal antennas

LTE services

Up to 16/32 active LTE users depending on licensing
Up to 150/50 Mbps depending on the bandwidth configured
VoLTE or CSFB to GERAN/UTRAN for voice
MOCN with active policy enforcement (SUMO)
Warning system broadcast - CMAS and ETWS supported
Full GBR and non-GBR support with QoS aware scheduler

LTE mobility

Reselection to/from macro layer & APs Intra-frequency, inter-frequency, Inter-RAT
Handover to/from macro layer & between APs Intra-frequency, inter-frequency, Inter-RAT S1 & X2-based

Interfaces

S1 (S1-Flex via gateway), X2
Uu LTE air interfaces to standard LTE UEs

Band Options

FDD-LTE: USA	Bands 2, 4, 5, 12, 13, 14, 17
FDD-LTE: ROW	Bands 1, 3, 7, 8, 20, 28

Spectrum Access mechanisms

Licensed - Single Operator
Licensed - SUMO Multi-Operator

Network Listen

LTE Network listen to support radio synchronisation and RF planning

Synchronisation

NTP support
IEEE1588v2 support
Network Listen
1 PPS port option (by request)

Security

3GPP air interface security
IPsec IKEv2 on AP-SeGW links
X509 certificate authentication with CRL
Secure boot and code signing

Environmental & physical

Dimensions	188 x 137 x 46mm (on stand) 176 x 130 x 34mm (without stand)
Power input	DC adaptor as standard, PoE with optional accessory
Temp. range	0° to 45°C
Operating	10 to 70% non-condensing
Ingress protection	IP30
Mounting	Wall mounted, free standing or ceiling mounted

Viper™ end-to-end small cell platform