

The S61 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

S61 nanoLTE®

4G SoHo Access Point
for small enterprises

4G
SOLUTION

The S61 Access Point

The S61 AP is a cost optimised indoor LTE-TDD small cell, targeted at enterprise environments such as small offices, home offices, retailers, and public spaces.

The S61 delivers 4G coverage and capacity into mass-market environments, and can be installed directly by end users in an unmanaged deployment.

With up to 90/10Mbps LTE TDD performance, the S61 supports up to 32 active 4G users, depending on the product variant.

Fully self-configuring, the S61 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 S61 AP has single band TDD LTE support, covering all major global markets, including CBRS. The S61 also incorporates ip.access' innovative SUMO™ technology, allowing a single S61 to provide coverage for multiple operators.

Full mobility is provided between the S61 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 S61 is housed in a compact all-plastic enclosure with internal antennas, which can be desk or wall, or ceiling mounted.

Viper™ virtualised enterprise RAN platform

The S61 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.



S61 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.

S61 nanoLTE Access Point

LTE radio

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

LTE services

- Up to 16/32 active users depending on configuration
- Up to 90/10Mbps 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

- TDD-LTE Bands 38, 40, 41, 42, 43, 48 (CBRS)
- Other bands available subject to demand

Spectrum Access mechanisms

- Licensed - Single Operator
- Licensed - SUMO Multi-Operator

Network Listen

- LTE Network listen to support radio synchronisation and RF planning

Synchronisation

- High stability OCXO
- NTP support
- IEEE1588v2 support
- Network Listen
- GPS
- 1 PPS port

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, ceiling mounted or free standing

Viper™ end-to-end small cell platform

