



## E61 nanoLTE®

4G Enterprise Access Point for enterprise environments

The E61 4G indoor small cell Access Point (AP) generates a high quality LTE signal in enterprise and public spaces for TDD deployments

### The E61 Access Point

The E61 is a single-band indoor LTE (4G) small cell AP, targeted at indoor enterprise environments such as offices, retailers, and indoor public spaces.

The E61 significantly improves indoor 4G coverage and capacity. The E61 AP can be installed by end-users in an unplanned simple “plug-and-play” installation model, leveraging ip.access’ Self Organising Network (SON) and Network Listen features (deployed in over 2 million small cells worldwide). Alternatively, the E61 AP can be installed by qualified technicians and service partners in a more complex planned deployment.

With up to 110/10 Mbps LTE TDD performance in 20MHz bandwidth, the E61 supports up to 32 active 4G users.

The E61 AP is available with Band 40 for global markets and Band 48 for OnGo (private LTE on the CBRS 3.5GHz band).

Full mobility is provided between the E61 AP and neighbouring 2G, 3G and 4G cells, allowing seamless handover of calls to or from the macro network, including X2 handover support to other ip.access 4G APs connected to the same nanoLTE Gateway.

Voice calls are supported with VoLTE, or using CSFB to offload voice service to a 2G or 3G neighbour cell.



E61 nanoLTE AP

Standard Ethernet IP backhaul is used. Power is provided from an external DC supply or PoE+.

The E61 is designed for wall or ceiling mounting, and is supplied with integrated antennas.

### Viper™ virtualised enterprise RAN platform

The E61 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 APs 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 for nanoLTE, allowing a single access point to provide coverage for all networks

E-class Enterprise APs are designed for enterprises, providing flexible in-building mobile coverage and capacity.

## E61 nanoLTE Access Point

### LTE radio

2 x 2 MIMO, 24dBm per port  
5, 10, 15 and 20MHz channel bandwidths  
Local Area Base Station class

### 4G services

Up to 32 users  
Up to 110/10 Mbps depending on the bandwidth configured  
VoLTE or CSFB to GERAN/UTRAN for voice  
Warning system broadcast - CMAS and ETWS supported  
Full GBR and non-GBR support with QoS aware scheduler

### 4G 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 based  
X2-GW based

### Interfaces

S1 (S1-Flex via gateway)  
X2 (via nanoLTE Gateway)  
Uu 4G air interfaces to standard 4G UEs

### Band options

TDD LTE  
40 and 48 (CBRS) with  
38/41/42/43 by request

### Network Listen

LTE Network listen to support radio synchronisation and RF planning

### Synchronisation

OCXO for high stability internal frequency  
GPS for TDD frame synchronisation  
IEEE 1588v2 for on-premise cluster synchronisation

### Security

3GPP air interface security  
IPsec IKEv2 on AP-SeGW links  
X.509 certificate authentication with CRL  
Secure boot and code signing

### Environmental & physical

Dimensions  
290 x 206 x 47mm including mounting bracket  
Weight  
1.6kg including mounting bracket  
Operating temperature range  
0° to 45°C  
Operating humidity  
10 to 70% non-condensing  
Ingress protection  
IP30  
Mounting  
Wall or ceiling mounting  
Power input  
12V DC or PoE+

