



nanoCBRS™ E61 CBSD

4G Enterprise CBSD for
enterprise environments

The E61 4G indoor small cell
CBRS Basestation Device (CBSD)
generates a high quality LTE signal
in enterprise and public spaces for
TDD deployments

The E61 CBSD

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

The E61 significantly improves indoor 4G coverage and capacity. The E61 CBSD 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 CBSD 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. Voice calls are supported with VoLTE.

The E61 CBSD is available with Band 48 for OnGo (private LTE on the CBRS 3.5GHz band).

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



nanoCBRS E61 CBSD

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.

nanoCBRS™ solution

The E61 is part of ip.access' OnGo certified nanoCBRS private network solution which integrates the following components:

- E61 CBSD providing best-in-class performance and EUD compatibility
- Virtualized Gateways and SAS Domain Proxy, which securely handle and route all traffic between the CBSDs and other components
- Virtualized management systems for CBSD provisioning, maintenance and monitoring
- Virtualized Evolved Packet Core for data routing between EUDs, including voice call traffic, and enabling application functionality such as push- to-talk and, optionally, break out to external networks for wider connectivity

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

nanoCBRS E61 CBSD

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 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 & CBSDs Intra-frequency, inter-frequency
Handover to/from macro layer & between CBSDs
intra-frequency, inter-frequency
S1 based
X2-GW based

Interfaces

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

Band options

TDD LTE
48 (CBRS)

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 CBSD-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+

nanoCBRS™ end-to-end OnGo certified solution

