



E61M

OnGo™ AP Module for
OEM integrators

The E61M is an LTE TDD small cell module for OEM applications including security, defence and private networks



E61M Integrator Module

The E61M Access Point

The E61M AP is a carrier grade and OnGo™ compliant integrator module for indoor enterprise and industrial OEM applications. For example, offices, retailers, hotels, hospitals, multi-dwelling units, indoor public spaces, factories and warehousing facilities.

Based on the Carrier Grade S6x family

The E61M is based on the S60z OEM/SDR platform, and runs the same carrier-grade 3GPP stack and application software. This makes it easy for integrators to work with the ip.access family of products in a unified way.

High-performance synchronisation

The E61M includes a high-performance oscillator to deliver excellent frequency stability, as well as integrated GPS and IEEE1588 support, providing a multi-layered synchronisation mechanism for robust and accurate timing.

LTE capacity

The E61M AP connects to all LTE TDD devices in its cell area, such as a compound, factory or office building, and provides service that exceeds industry accepted traffic demands.

Compact module

The E61M is compact and draws less than 24W of DC power. It provides a quick drop-in solution for integrators. The SMA connectors allow easy and secure attachment of RF cables.

Maximum flexibility for OEM applications.

E61M Access Point

Radio

Radio front end:

- Band 48 for LTE (1 x 24dBm for SISO or 2 x 24dBm for MIMO)

Rx sensitivity better than -100dBm
10 and 20MHz channel bandwidths

CBRS/OnGo™

Compliance to eCFR Title 47
Chapter I Subchapter D Part 96
Suitable for Class A or Class B
finished product

SAS client to server interface

ICG functionality within nanoVirt
for enterprise cluster deployment

LTE Services

Nominally 32 UEs in RRC
Connected Mode

Effectively unlimited UEs in EMM
Registered state

Smart scheduling for perceptually
concurrent access for hundreds
of users depending on service

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

Traffic Modes

Mainly downlink:

110d 10u Mbps Regular usage

Balanced:

93d 40u Mbps CCTV,
peer-to-
peer, sensor
networks, etc.

Interfaces

LTE S1 (S1-Flex and MOCN via
gateway)

X2 for intra-gateway handover

Uu LTE and 3G air interfaces to
standard LTE and 3G UEs

Synchronisation

High stability OCXO

NTP support

IEEE1588v2 support

1PPS port

Network Listen

GPS

Network Listen

Network Listen to support radio
synchronisation, RF planning and
SAS information

Security

3GPP air interface security

IPsec IKEv2 on AP-SeGW links

X509 certificate authentication
with CRL

Secure boot and code signing

FCC Part 96 compliance for SAS
Client interfacing

Physical

Dimensions

225 x 160 x 30mm

Weight

0.5kg

Power input

12V DC

Physical interfaces

Ethernet port

1Gbps

SMA connectors

2 x RF full duplex,
GPS Antenna, 1 PPS input,
Network Listen

I/O port

Control signalling and LED
breakout

The E61M AP
is ideal for
private network
applications

