



E62

Multi-RAT AP Module for OEM integrators

The E62 is a 3G/4G/5G small cell module for OEM applications including aviation, maritime, defence and private networks

The E62 Access Point Module

The E62 AP is a carrier grade integrator module for OEM applications, with dual-band, dual-mode radio functionality.

Based on the Carrier Grade S6x family

The E62 AP module 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 E62 AP module 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.



E62 Multi-RAT Module

5G

4G

3G

Versatile RF solution for multiple RATs

The E62 AP module operates in 3G or 4G (LTE FDD) mode, and supports flexible RAT switching through software changes. This allows a single unit to support 3G and 4G without any hardware changes.

LTE capacity

The E62 AP connects to all LTE devices in its cell area, such as an aircraft, and providing service that exceeds industry accepted traffic demands.

5G upgrade

The E62 AP supports an R15 5G primary cell capability by software upgrade, providing a future proof and elegant migration path to 5G.

Compact module

The E62 AP module 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.

E62 Access Point Module

Radio

Two radio front ends, switched according to the current RAT in use:

- Band 1 for 3G (1 x 24dBm)
- Band 3 for LTE (1 x 24dBm for SISO or 2 x 24dBm for MIMO)

Rx sensitivity better than -100dBm

4G

LTE FDD Band 3 (1800MHz)

2 x 2 MIMO (SISO also supported)

3 / 5 / 10 / 15 / 20MHz channel bandwidths

Effectively unlimited UEs in EMM Registered state

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

Nominally 32 UEs in RRC Connected Mode

Up to 150/50Mbps (bandwidth dependent)

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

S1-Flex and MOCN support

3G

Band 1 (2100MHz)

Up to 24 active users (option for 30)

HSPA 21/5.75 Mbps

CS voice
AMR
WB-AMR (Config-A)

Multi-RAB to each UE
CS voice and/or up to 3 HSDPA/HSUPA
or
CS voice and/or up to 2 R99

lu-Flex support

Cell broadcast

Interfaces

LTE S1 (S1-Flex via gateway), X2

3G luh

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

5G

R15 NSA Primary Cell capability

Synchronisation

High stability OCXO

NTP support

IEEE1588v2 support

1PPS port

Network Listen

GPS

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 E62 AP Module is ideal for aviation applications

