

The E16, E24 and E32 nano3G Access Points generate a high quality UMTS signal inside small offices, shops, homes and public spaces, using broadband backhaul for rapid deployment and low-cost operation

E16/24/32 nano3G®

3G Enterprise Access Point
for enterprise and public access

3G
SOLUTION

The E-class Access Points

The E16, E24 and E32 APs support 16, 24 and 32 simultaneous active users respectively for voice and data. A full +24dBm (250mW) of transmit power and HSPA+ at 21/5.75 Mbps make the E-class range of Access Points extremely effective for medium and large in-building deployments.

Full mobility is provided with configurable Open or Closed Access, bi-directional handover (i.e. both hand-out and hand-in) to 3G, LTE and 2G macro networks, and support for the 3GPP Rel 9 luh femto standard.

The E-class APs also feature integrated Power over Ethernet (PoE+) to simplify cabling in complex sites by removing the need for power to be available where the picocell is deployed. They have removable antennae with SMA connectors to enable connectivity into external antennas or DAS.

A high-stability oscillator eliminates the need for multiple high quality NTP servers that are normally required for maintaining oscillator discipline on femtocells, and gives picocell-class timing synchronisation and optimised startup time.

Easy deployment

The E-class APs offer a flexible commissioning capability enabling a choice of approaches to suit any type or scale of deployment.

Easy installation combined with fast commissioning and AP startup times mean that sites can be brought into service quickly and efficiently.

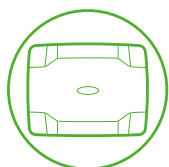
Viper™ virtualised enterprise RAN platform

The E16, E24 and E32 are 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
- As A Service deployment models, including core network integration, AP deployment, and network operation.



E16/E24/E32 nano3G AP



ip.access provides a complete end-to-end solution that integrates with your core network and starts generating revenues quickly.

The result is fast data speeds and high-quality voice for your indoor users and dramatically improved capacity for those using the macro cell outside as well.

nano3G E-class Access Points

E-class small cells

Simultaneous data and voice users	16, 24 or 32
RF Output Power	250 mW/+24 dBm (+13dBm for Band 5)
UMTS bands	1, 2/5, 4
Electrical Power	<18 W 12V DC socket for AC/DC adaptor
PoE	PoE+ integrated
External antennas	Optional
Oscillator	OEXO better than 100ppb
NTP	Time stamp for certificate validation
Access Mode	Open/closed access

Environmental & physical

Dimensions	274 x 211 x 58.6 mm
Temp. range	0° to 45°C
Operating humidity	10 to 70% non-condensing
Ingress protection	IP40
Mounting	Wall Mounted

Network Listen

3G & 2G Network listen to support radio synchronisation and RF planning

Security

3GPP air interface security

IPsec IKEv2 on AP-SeGW links

X509 certificate authentication with CRL

Interfaces

luh interface to AC

Uu air interface to standard 3G UEs

UTRAN mobility

Reselection & handover to/from macro layer

Reselection & handover between APs

Intra-frequency, Inter-frequency, Inter-RAT

UTRAN services

AMR & WB-AMR CS Voice

Rel 99 PS 64/ 128/ 384 kbps

HSPA+ 21/5.75 Mbps

Supplementary Service transparency

SMS, MMS, Cell Broadcast

Multi-RAB combinations to each UE

Voice+ up to 3 HSPA RABs

Voice+ up to 2 R99 PS

Cell_FACH, Cell_PCH, Fast dormancy for high UE density

Viper™ end-to-end small cell platform

