

Accelleran E1012 CBRS Local Area Small Cell

CBRS COVERAGE AND CAPACITY IN A BOX

Accelleran E1012 CBRS Small Cell is the solution to provide LTE TDD network coverage and capacity in medium size office environments, venues, shopping centres, urban/suburban/rural and remote areas... providing carrier and mission-critical grade RAN engineering in a small (3.5 litres) form factor for Cat. A and Cat. B CBSD deployments.

EASE OF DEPLOYMENT

The E1012 CBRS Small

Cell is designed to be easily and flexibly deployed by a normal user by just connecting an PoE/Ethernet cable. Its Plug and Play capabilities do the rest.

LOWEST COST

For lowest cost solution the E1012 Small Cell supports a single 2x2 MIMO transceiver chain (cell) in the LTE B48 CBRS band (3550-3700MHz) and can optionally integrate embedded EPC (Network-in-a-Box) and Neutral Host (GWCN, MOCN) functionality.



PRODUCT DESCRIPTION

The E1012 is a small form factor LTE TDD (CBRS) Small Cell, supporting by default a single cell capable of providing up to 250mW RF power per antenna port.

It is intended for deployment in enterprise, public urban and suburban scenarios as a Cat. A CBSD device, where typically a planned insideout/ outside-in deployment of Small Cells will complement macro coverage by offloading the macro and increasing the available coverage in the enterprises, venues, shopping centres, urban hotspots...or as a single layer ultra-dense Small Cell only private LTE network. Alternatively, it can also be deployed for Fixed Wireless Access deployments in urban/suburban and in remote and rural scenarios as a Cat. B CBSD with appropriate antennas.

- Its sleek appearance makes it very suitable for any type of environments. It is truly a carrier and mission critical grade RAN network node with the skin and appearance of a normal router product.
- As a result of its flexible software architecture, the E1012 CBRS Small Cell is software upgradeable to support a roadmap of new features.
- The E1012 CBRS Small Cell offers great flexibility for backhaul connectivity via its 1Gbps Ethernet port provided as standard.

- LTE TDD 3GPP and FCC Compliant Local Area Small Cell for Cat. A and Cat. B CBSD deployments
- 1 transceiver per unit (single cell)
- 24 dBm/250 mW Tx power per antenna port
- 2x2 MIMO
- 10 & 20MHz Channels
- B48/CBRS Band (3550-3700MHz)
- Integrated GNSS
- Gigabit Ethernet Connectivity (PoE)
- Optional Embedded EPC (Network-in-a-Box)
- Optional Neutral Host (GWCN, MOCN)
- Flexible Remote Management Interface (inc SAS)

ABOUT ACCELLERAN

Accelleran was founded at the end of 2012 by a team of veterans of the small cell industry. With an average experience of more than 20 years, the team has been active in small cell development for most of the past decade. The results of this experience have been distilled into the E1012 CBRS Small Cell.

Our key objectives in all product developments are:

• Carrier & Mission-Critical Grade Quality

We insist on SW development standards and practices from the safety-critical industries in order to ensure our products deliver "five nine's" reliability out of the box.

• Ease of Deployment and Configuration

Through careful design and close collaboration with our partners we are driving down the costs and complexities of small cell deployment in the field - where it counts.

• Best-in-Class Manageability

We understand the increasing demands for realtime insight into network performance and enduser experience. We have engineered an open and flexible management platform designed to enable easy integration with standards-based or proprietary OSS and SON systems.

• Security

All our products are built on trusted platform technology embedding per-device keys and secure tunnelling endpoints into the same silicon. All code is signed and checked at runtime to protect against the possibility of unit hijack.

The E1012 CBRS Small Cell for Fixed Wireless Access, Private LTE or Neutral Hosts

Mode	Band	Product
TDD	B42	E1010
	B43	E1011
	B48/CBRS	E1012
	B38/41	E1013
	B40	E1014
FDD	B7	E1020
	B3	E1021
	B1	E1022
Other bands on request		

Deploy the E1012 CBRS Small Cell in medium sized enterprise, venues, shopping centres, urban hotspots... as a Cat. A CBSD device to enable inside-out/outside-in HetNet or ultra-dense scenarios to cost effectively provide coverage and capacity, or in rural, suburban and remote scenarios as a Cat. B CBSD device to provide coverage.

Whether you are deploying a Private LTE solution (Enterprise, Industrial IoT,...) to enable vertical markets, a Neutral Host solution to enable new business models, or a Fixed Wireless Access deployment, you will always get the most out of the shared spectrum capabilities of your network.

E1012 CBRS Small Cell Technical Specification

Single Cell LTE TDD CBRS Local Area Small Cell (Cat. A/ Cat. B CBSD)	
Transceiver Specification <ul style="list-style-type: none"> • 2 x 2 MIMO • Local Area Basestation Class (Cat. A/ Cat. B) • 24dBm/250mW RF power per antenna port • 1 transceiver per unit (single cell) 	Band Support <ul style="list-style-type: none"> • LTE TDD Band 48/CBRS (3550-3700MHz) • Other TDD and FDD Bands on request • Non-CBRS product variants
Network Interfaces	
Layer 1 & 2 <ul style="list-style-type: none"> • 1 GBE port • IPv4/IPv6 	Layer 3 and OAM <ul style="list-style-type: none"> • S1, SAS, Type 1 OAM (TR-069) or OAM Webserver • Alternative OAM interface possible (CLI/Prop/Type 2)
LTE Feature Support	
<ul style="list-style-type: none"> • 3GPP Release 9 (upgradeable to Release 10) • Up to 64 active users • LTE TDD • Integrated GNSS • Cell Selection/Re-selection • Radio Bearer Control 	<ul style="list-style-type: none"> • Admission Control • Scheduler & Rate Control • Optional Embedded EPC (Network-in-a-Box) • Optional Neutral Host (GWCN, MOCN) • Open, CSG or Hybrid Access Control • SAS, OAM (CM, PM, FM, Diagnostics) & SON
Security	
<ul style="list-style-type: none"> • 3GPP standard LTE air interface security • IPSec AES encrypted tunnels on all network connections 	<ul style="list-style-type: none"> • Trusted Platform technology embedded in silicon • Per Device PKI key pairs • Secure Boot through digital signatures of all executables
Power	
<ul style="list-style-type: none"> • 56V PoE 	<ul style="list-style-type: none"> • <21W (Max Tx power, full data traffic)
Physical	Environmental
<ul style="list-style-type: none"> • Dimensions: 270 x 200 x 65mm (3.5 litres, exc. antenna) • Ingress Protection: IP67 	<ul style="list-style-type: none"> • Weight : 2.8 Kgs • Temperature: -40 to +50 °C (operating)

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