

Accelleran L1000 Backpack Series

LTE FDD or LTE TDD MEDIUM RANGE NETWORK-IN-A-BOX IN SMALLEST FORM FACTOR

Accelleran L1000 Backpack Series is the solution to provide LTE FDD or LTE TDD Network-in-a-Box coverage in rapid deployments for Public Protection and Disaster Relief scenarios providing carrier and mission-critical grade RAN engineering in an ultra compact lightweight (<5.4 Kgs) form factor

EASE OF DEPLOYMENT

The L1000 Backpack Series is designed to be easily and flexibly carried and deployed in less than 3 minutes by PPDR personnel by just powering on.

LOWEST TCO

For lowest cost solution the L1000 Backpack Series supports a single 2x2 MIMO transceiver chain (cell) in different LTE FDD or LTE TDD bands and integrates embedded EPC functionality (Network-in-a-Box). The leading edge RF frontend technology enables the lowest TCO in the market for a product of its class.



- LTE FDD or LTE TDD 3GPP Compliant Medium Range Small Cells (Cat-B CBRS)
- 1 transceiver per unit (single carrier)
- 40 dBm/10 W Tx power per antenna port (config to 2W and 5W)
- 2x2 MIMO
- 5, 10, 15 & 20MHz Channels (10/20 CBRS)
- TDD Bands 38, 40, 41, 42, 43, B48/CBRS*
- FDD Bands 1, 3, 7, 14, 28, 68 (Other bands on request)
- Integrated GNSS (GPS, GLONASS, BDS)
- Embedded EPC (Network-in-a-Box)
- Optional Gigabit Ethernet Connectivity
- Flexible Remote Management Interface

PRODUCT DESCRIPTION

The L1000 Backpack Series is a small form factor Network-in-a-Box LTE FDD or LTE TDD Small Cell, supporting by default a single cell capable of providing up to 10W RF power (configurable for 2W and 5W also) per antenna port.

It is intended for rapid and self contained coverage deployments for Public Protection and Disaster Relief scenarios.

- Its sleek appearance makes it very suitable for any type of environments. It is truly a complete carrier and mission critical grade Network-in-a-Box with the skin and appearance of a normal backpack.
- As a result of its flexible software architecture, the L1000 Backpack Series is software upgradeable to support a roadmap of new features.
- As a result of the use of a patent pending industry leading frontend from Allen Vanguard Wireless, the L1000 Backpack product design delivers high output power, low power consumption, small size and high efficiency.
- The L1000 Backpack Series offers great flexibility if, beyond a self-contained network, some backhaul connectivity via satellite or wireless links is required.

• Best in Class Silicon

The beating heart of the L1000 backpack unit is the Cavium Octeon Fusion-M CNF7130 baseband processor which delivers unequalled processing power in a single SOC. Accelleran, as a leading vendor of Cavium-based solutions, is one of the first to bring products leveraging this new generation of silicon to the small cell market.

• 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.

• Flexibility for RAN & V-RAN Deployment

We have architected our solutions from the beginning with hardware platform independence in mind. The same software solution can be deployed from fully embedded RAN architecture with embedded EPC to 5G disaggregated and virtualised vRAN.

• Best-in-Class Manageability

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

The L1000 Backpack Series Network-in-a-Box for PPDR markets

ABOUT ACCELLERAN

The Accelleran team has been a recognized leader in the small cell industry for more than ten years. With an average experience of 20+ years each, the team offers unrivalled expertise across the full range of skillsets required for success in the challenging RAN solution market.

The L1000 is the result of the combination of Accelleran's expertise in carrier-grade and mission-critical grade RAN and V-RAN software solutions with Allen Vanguard Wireless leading edge Radio Frequency Front End technology. The L1000 Backpack delivers an exceptional combination of features, performance, reliability and efficiency in the smallest form factor and offering the lowest Total Cost of Ownership in the market.

FURTHER INFORMATION

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Mode	Band	Product
TDD	B42	L1010
	B43	L1011
	B48/CBRS*	L1012
	B38/41	L1013
FDD	B40	L1014
	B7	L1020
	B3	L1021
	B1	L1022
	B14/28/68	L1023
Other bands on request		

Deploy the L1000 Backpack Series in outdoor venues, rural, urban, suburban and remote (industries, special events, public safety...) scenarios to provide rapid coverage with this ultra compact lightweight (less than 5.4 Kgs) Network-in-a-Box.

L1000 Backpack Series Technical Specification

Single Cell LTE FDD or LTE FDD Medium Range Network-in-a-Box	
Transceiver Specification	Band Support
<ul style="list-style-type: none"> 2 x 2 MIMO Medium Range Basestation Class 40dBm/10W RF power per antenna port (config. to 2W, 5W also) 1 transceiver per unit (single carrier) 	<ul style="list-style-type: none"> LTE FDD Bands 1, 3, 7, 14, 28, 68 LTE TDD Bands 38, 40, 41, 42, 43, 48/CBRS* Other FDD and TDD Bands on request <p>*: B48/CBRS limited to 47dBm/EIRP</p>
Network Interfaces	
Layer 1 & 2	Layer 3 and OAM
<ul style="list-style-type: none"> 1 optional GBE port IPv4/IPv6 	<ul style="list-style-type: none"> SGi (Network-in-a-Box) Type 1 OAM (TR-069/TR-196), Type 2 OAM (SNMP), Kuha, OAM Webserver or CLI SAS (CBRS) Alternative OAM interface possible (XML, Netconf, Proprietary)
LTE Feature Support	
<ul style="list-style-type: none"> 3GPP Release 9 (upgradeable to Release 10) Up to 64 active users LTE FDD or LTE TDD Integrated GNSS (GPS, GLONASS, BDS) Cell Selection/Re-selection Radio Bearer Control 	<ul style="list-style-type: none"> Admission Control Scheduler & Rate Control Embedded EPC (Network-in-a-box) 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"> 28VDC, Battery or Solar options available 	<ul style="list-style-type: none"> <56W (Max Tx power, full data traffic)
Physical	Environmental
<ul style="list-style-type: none"> Dimensions: 425 x 265 x 143 mm (16 liters) Ingress Protection: IP67 	<ul style="list-style-type: none"> Weight : <5.4 Kgs Temperature: -20 to +50°C (operating)

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