

# AxxceLTE™ BBU

NEXT GENERATION PERFORMANCE. UNPARALLELED VALUE.

## Benefits:

- Easy to install and operate
- Scalable architecture allowing for growth in the network
- Robust design suitable for the most demanding markets
- Can be combined with Axxcelera's AxxceLTE™ μEPC and AxxceLTE™ RRH to create a complete broadband access network solution



## AxxceLTE™ BBU (Base Band Unit) Overview:

The AxxceLTE™ Base Band Unit provides all the processing necessary for multiple sectors of LTE service in a compact outdoor design. It connects to a maximum of three AxxceLTE™ RRH units over 6Gbps CPRI fiber links using a daisy chain or star configuration. It is also possible to configure the baseband units as redundant pairs. This flexible architecture allows for easy expansion while protecting prior capital investment. The best-in-class system can be configured to provide optimal performance in the carrier, wireless ISP, industrial, public safety and private markets.

## Key Features:

- Multi-sector support in a compact all-outdoor installation footprint
- Deployable indoor or outdoor
- Integrated Metro-Ethernet switch
- 3GPP Release 9 Compliant
- CPRI connection to radio unit
- Provides GbE Power-Over-Ethernet interface
- Integral GPS receiver

## Axxcelera Broadband Wireless

Axxcelera Broadband Wireless is a wireless infrastructure company that develops technology for the deployment of broadband wireless communications. Formed in 2001 the company has a strong track record of providing wireless broadband platforms that bridge the last mile, currently replacing the local loop for corporate, small business and residential subscribers.

## AxxceLTE™ BBU Specifications:

3GPP compliance .....	Release 9 with software upgrade to Release 10
Duplexing mode .....	TDD and FDD support
Channel Bandwidth .....	1.4, 3, 5, 10, 15, 20MHz
Channel Capacity .....	Up to two 20MHz channels
MIMO support .....	2x2 or 4x4 (SU-MIMO and MU-MIMO support)
Peak data rates.....	2x2 MIMO: DL @ 150Mbps, UL @ 75Mbps 4x4 MIMO: DL @ 300Mbps, UL @ 150Mbps
One way latency .....	< 5msec (user data)
Number of UE's .....	250 active UEs per 2x2 MIMO sector
UE support .....	Category 1-5
Number of bearers per UE .....	8
Self organizing network (SON) .....	As per Release 9 specifications
Regulatory compliance .....	FCC, CE
Synchronization .....	Integral GPS, IEEE1588/Synch Ethernet, or external 1PPS
Connectors .....	3 x CPRI V4.1; 2 x GbE (SFP); GbE (RJ45); 1PPS-SyncIn; 1PPS-SyncOut; GPS Antenna; Power Input
Remote radio head interface .....	Three ports per CPRI V4.1 with line rate up to 6144 Mbps, field serviceable SFP modules, multi-mode or single mode fiber, supports daisy-chain or star topology
Backhaul interface .....	Two GbE ports via field-serviceable SFP modules, supports stacking multiple baseband units into a single backhaul pipe
Power over Ethernet.....	Gigabit Ethernet power sourcing port per IEEE802.3at, RJ45
Management support.....	Operation, Administration, Maintenance, and Provisioning interface to Axxcelera NMS; extends management to RRH via CPRI control and management port
Physical size.....	32cm (W) x 54cm (L) x 12cm (D)
Weight .....	<12Kg
Temperature .....	-40°C to 55°C
Humidity.....	Up to 100% condensing
Ingress protection rating.....	IP67
Regulatory compliance .....	FCC, CE
Environmental robustness.....	NEMA 4, IEEE1613 compliant
Physical security .....	Per FIPS-140-3 Level
Power Input .....	36 to 60 VDC
Power consumption .....	Up to 100W (not including PoE consumption)
Mounting.....	Pole or Wall

