Netronics

NetAstra AU 5x200

Sector Base Station – NetAstra AU 5x200

NetAstra AU 5x200 is a Sector Base Station Radio unit, providing up to 250 Mbps net aggregate throughput and delivering access connectivity up to 32 Subscriber Units (SU).

NetAstra AU 5x200 supports from 4.9 to 6.0 GHz and complies with FCC, IC (Canada), WPC (India), MII (China) and Universal regulations.

NetAstra AU 5x200 is connectorized for use with external antenna (2 xN-type).

Product Highlights

- Up to 250 Mbps aggregated throughput
- Guaranteed Service Level Agreement (SLA) per SU
- Outstanding short and constant latency
- Support up to 32 SUs
- Long range – up to 40 km/25 miles
- Single radio supporting multiple bands
- Advanced MIMO, OFDM and Diversity technologies
- Excellent operation in nLOS and NLOS scenarios
- Robust and reliable to operate in tough conditions, extreme temperatures
- Ease of operation and maintenance

Product Specifications

Configuration	
Architecture	Outdoor Unit Connectorized for external antenna (2 xN-type)
PoE to ODU Interface	Outdoor CAT-5e; Maximum cable length: 100 m for 10/100BaseT and 75 m for 1000BaseT

Radio	
Capacity	250 Mbps net aggregate throughput
Subscriber Units (HSUs) support	Up to 32 SUs
Range	Up to 40 km / 25 miles
Channel Bandwidth	Configurable: 5, 10, 20 and 40 MHz (for the default band)
Modulation	2x2 MIMO-OFDM (BPSK/QPSK/16QAM/64QAM)
Bandwidth allocation	Configurable: Symmetric and Asymmetric
Adaptive Modulation & Coding	Supported
DFS	Not Supported (for the default band)
Diversity	Supported
Max Tx Power	25 dBm
Duplex Technology	TDD
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6
Encryption	AES 128; FIPS 197; AES 256 optional (via Software License Key)
Support Indoor units	Netronics PoE devices
End to End Latency	Typical: 3.5 msec @ 2 SUs; 20 msec @ 32 SUs
Layer 2	Bridging learning of 5K MAC addresses
QoS	Packet classification to 4 priority queues according to 802.1p and Diffserv
VLAN Support	802.1Q, QinQ, 4094 VLANs
TDD Intra Site Synchronization	Supported
TDD Inter Site Synchronization	Supported through common GPS receiver per site

Supported Bands

Band	Channel BW 5 MHz	Channel BW 10 MHz	Channel BW 20 MHz	Channel BW 40 MHz	Radio Compliance
5.8 GHz FCC/IC*	**5.7275 - 5.8475**	**5.725 - 5.850**	**5.725 - 5.850**	**5.725 - 5.850**	**FCC 47CFR Part 15.247; IC RSS-210**
4.9 GHz FCC/IC	4.9425 - 4.9875	4.940 - 4.990	4.940 - 4.990	-	FCC 47CFR Part 90 Subpart Y; IC RSS-111
4.9 GHz Universal	4.8975 - 4.9925	4.895 - 4.995	4.890 - 5.000	4.880 - 5.000	Universal
5.1 GHz Universal	5.1475 - 5.3375	5.145 - 5.340	5.140 - 5.345	5.130 - 5.355	Universal
5.0 GHz Universal	4.9975 - 5.1525	4.995 - 5.155	4.990 - 5.160	4.980 - 5.170	Universal
5.2 GHz FCC/IC	5.2525 - 5.3475	5.255 - 5.345	5.255 - 5.345	5.255 - 5.345	FCC 47CFR Part 15.407; IC RSS-210
5.4 GHz FCC/IC	5.4775 - 5.7175	5.480 - 5.715	5.480 - 5.715	5.480 - 5.715	FCC 47CFR Part 15.407; IC RSS-210
5.4 GHz IC	5.4775 - 5.7175	5.480 - 5.715	5.480 - 5.715	5.480 - 5.715	IC RSS-210
5.4 GHz Universal	5.4725 - 5.7225	5.470 - 5.725	5.465 - 5.730	5.455 - 5.740	Universal
5.8 GHz WPC	5.8275 - 5.8725	5.825 - 5.875	5.825 - 5.875	5.815 - 5.885	WPC (India) G.S.R 38(E) dated 19 January. 2007 Notification
5.8 GHz MII	5.7375 - 5.8375	5.735 - 5.840	5.730 - 5.845	5.720 - 5.855	CMIIT RTA
5.9 GHz Universal	5.7275 - 5.9525	5.725 - 5.955	5.720 - 5.960	5.710 - 5.970	Universal
6.0 GHz Universal	5.6975 - 6.0525	5.695 - 6.055	5.690 - 6.060	5.680 - 6.070	Universal

* Default Band

Mechanical	
ODU Dimensions	28(w) x 19.5(h) x 8(d) cm
ODU Weight	2.4 kg / 5.29 lbs
Power	
Power Feeding	Power provided over ODU-IDU cable
Power Consumption	<20 W
Environmental	
Operating Temperatures	-35°C to 60°C / -31°F to 140°F
Humidity	100% condensing, IP67 (totally protected against dust and against immersion up to 1 m)
Safety	
FCC/IC (cTUVus)	UL 60950-1, UL 60950-22, CAN/CSA C22.2 60950-1, CAN/CSA C22.2 60950-22
ETSI	EN/IEC 60950-1, EN/IEC 60950-22
EMC	
FCC	47 CFR Class B, Part15, Subpart B
ETSI	EN 300 386, EN 301 489-1, EN 301 489-4
CAN/CSA-CEI/IEC	CISPR 22-04 Class B
AS/NZS	CISPR 22-2004 Class B

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