



NetAstra SU 5x10 AD

Subscriber Unit – NetAstra SU 5x10 AD

NetAstra SU 5x10 AD is a Subscriber Unit (SU), providing high capacity access connectivity of up to 10 Mbps net aggregate throughput. NetAstra SU 5x10 works with all NetAstra base stations.

NetAstra SU 5x10 AD supports from 4.9 to 6.0 GHz and complies with FCC, IC (Canada) WPC (India), MII (China) and Universal regulations.

NetAstra SU 5x10 AD with an Embedded antenna and connectorized for external antenna (2 xN-type).

Product Highlights

- Up to 10 Mbps net aggregate throughput
- Long range – up to 40 km/25 miles
- Guaranteed Service Level Agreement (SLA) per SU
- Outstanding short and constant latency
- Advanced MIMO, OFDM and Diversity technologies
- Robust and reliable operation in tough conditions, extreme temperatures and non line-of-sight scenarios
- Ease of operation and maintenance



Product Specifications

Configuration

Architecture	Outdoor Unit with an Embedded antenna and 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	10 Mbps net aggregate throughput
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)
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)
Bandwidth allocation	Configurable: Symmetric and Asymmetric
Support Indoor units	Netronics PoE devices
Layer 2	Hub Mode
QoS	Packet classification to 4 priority queues according to 802.1p and Diffserv
VLAN Support	802.1Q, QinQ, 4094 VLANS

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
5.0 GHz Universal	4.9975 - 5.1525	4.995 - 5.155	4.990 - 5.160	4.980 - 5.170	Universal
5.1 GHz Universal	5.1475 - 5.3375	5.145 - 5.340	5.140 - 5.345	5.130 - 5.355	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 9(d) cm
ODU Weight	2.5 kg / 5.51 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



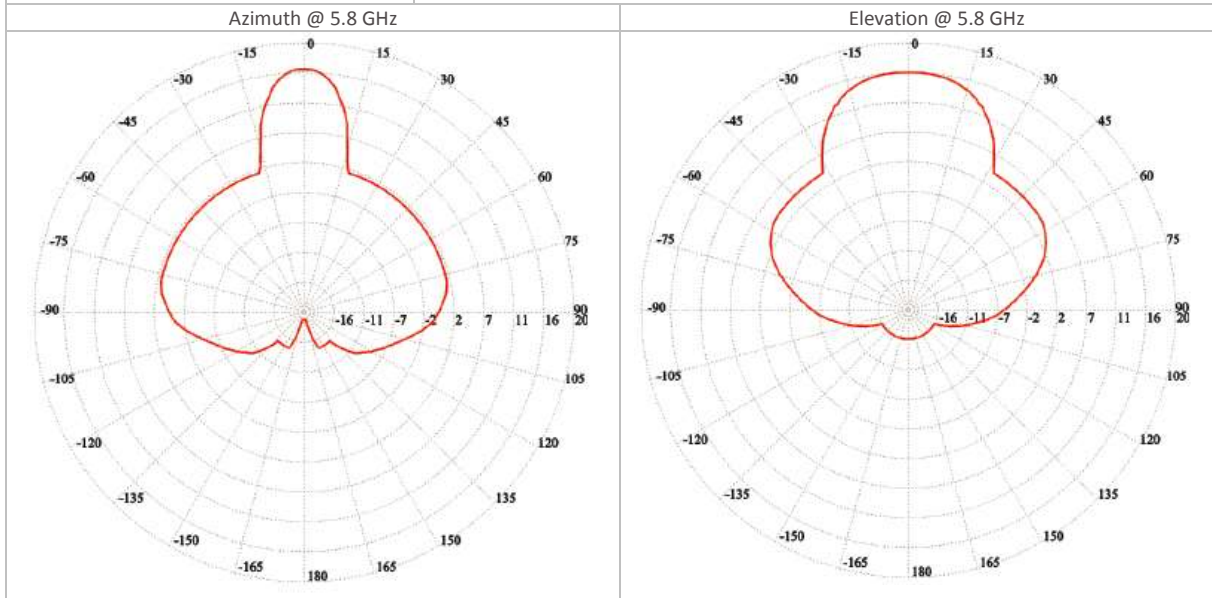
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Integrated Antenna

Gain	15 dBi
VSWR	1.5 : 1 (typ)
3 dB Beam width	30° (typ)
AZ & EL Beam Squint	5°
Polarization	Dual Linear (Vertical and Horizontal)
Side lobes Level	ETSI EN 302 326-3 V 1.1.2 (2006-03) DN1
Cross Polarization	ETSI EN 302 326-3 V 1.1.2 (2006-03) DN1
F/B Ratio	-25 dB (max)
Port To Port Isolation	20 dB (min)
Lightning Protection	DC grounded

Antenna Pattern



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