



NetStream 5x750 2G5A

NetStream 5x750 2G5A is a premium, ultra-capacity Point-to-Point (PtP) solution for backhaul, access and for connecting a wide variety of bandwidth demanding applications.

NS 5x750 2G5A Point-to-Point is an outdoor radio that works in the 4.9 to 6GHz band and delivers up to 2.5Gbps.

The radio ensures outstanding performance and highest possible throughput in congested spectrum using a field-proven air interface combined with an integrated antenna that assures best interference mitigation with remarkable low side lobe levels.

NS 5x750 2G5A exceptionally powerful packet-switching performance facilitates high short packet traffic and leverages upon the industry-strong encryption scheme (AES 256), to ensure top level security.

NS 5x750 2G5A enables radio collocation using a built-in GPS, to save upon hub tower space when deployed in the hub site.

IP 67 compliant, NS 5x750 2G5A is an extremely durable product.



Product Highlights

- Up to 2.5Gbps net aggregated*
- 4.9-6.06 GHz
- Ch. BW 20 / 40 / 80 / 160 MHz*
- Integrated antenna - 24dBi, 22dB SSL
- Up to 4096QAM
- Latency (avg) < 2msec (TBD)
- Up to 60 km / 35 miles
- Dynamic channel selection **
- Adaptive modulation
- Dynamic CBW selection
- Configurable UL/DL ratio
- Online spectrum scan**
- TDD synchronization for colocation**
- AES256 over-the-air encryption
- 8 queues QOS (Diffserv/802.1P)
- Built-in GPS/GNSS
- Highly durable - IP 67

* May be limited. Subject to regulation

** In roadmap – Future SW upgrade



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Product Specifications

Configuration	
Architecture	Outdoor unit with integrated panel antenna
Wireless topology	Point to Point unit
PoE Interface	Outdoor CAT-5e; Maximum POE cable length: 75m for 1000 & 2500 BaseT
Radio	
Max capacity	2.5Gbps (Universal), 1.2Gbps (FCC) net aggregate throughput
Range	Up to 60 km / 35 miles
Frequency Range	4.900 GHz – 6.06 GHz*
Channel bandwidth	Configurable: 20, 40, 80, 160 MHz*
Modulation	OFDM (from BPSK up to 4096QAM)
Error correction	FEC (LDPC) R = 1/2, 2/3, 3/4, 5/6
Duplex technology	TDD
Dynamic channel selection	Supported**
Antenna modes	MIMO 2x2, adaptive spatial multiplexing/diversity
Max TX power	26 dBm* per chain
Encryption	AES256
TDD intra/inter site sync	built-in GPS/GNSS**
Uplink/Downlink ratio	Configurable: 50/50, 25/75, 75/25. 5% configuration resolution **
Packets per second	700Kpps
Spectrum scan	Online spectrum scan**
DFS	Supported**
RFD (Radio Frame Duration)	2.5msec, (1.25msec) **
Networking	
QoS	Packet classification to 8 priority queues according to 802.1P or Diffserv
VLAN support	802.1Q, QinQ2, VLAN tagging**
MTU size	1540 bytes. Jumbo frame support**
ODU management	IPv4/IPv6** dual-stack; SNMPv1**, SNMPv3**, HTTP/HTTPS using web browser; BLE**, SSH**
Layer 2 bridge	Supported
RADIUS Authorization	Supported**
RADIUS User authentication	Supported**
Syslog	Supported**
Mechanical	
Dimension Integrated	373 x 370 x 98 mm / 14.7 x 14.6 x 3.9 Inch
Weight	INT: 2.6 Kg / 5.7 lbs
Power	
Power Feeding	Power feeding over CAT5E PoE cable
Power Consumption	Up to 30W
POE input range	42.5–57.0 V. standard 802.3AT
Environmental	
Operating temperature	-40°C to 60°C / -40°F to 140°F
Humidity	100% condensing
Enclosure protection	IP 67 per EN/IEC 60529, NEMA Type 4/4X Enclosure
MTBF	>1,200,000 hours (Telcordia SR332 @25°C)
Lightning protection	DC Grounded enclosure
Wind resistance	180kmh / 112 mph
Maritime	IEC-60068-2-11 Test Ka: Salt mist.
Integrated Antenna	
Type	Panel
Gain	24 dBi (typical)
VSWR	2
3 dB Azimuth beamwidth	9 deg
3 dB Elevation Beamwidth	8 deg
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes level	-22 dB(typical)
Cross polarization	20 dB
F/B Ratio	27 dB
Port To Port isolation	30 dB
Lightning protection	DC Grounded via enclosure
Mechanical	Dimensions 40x40cm, connector 2XN - female



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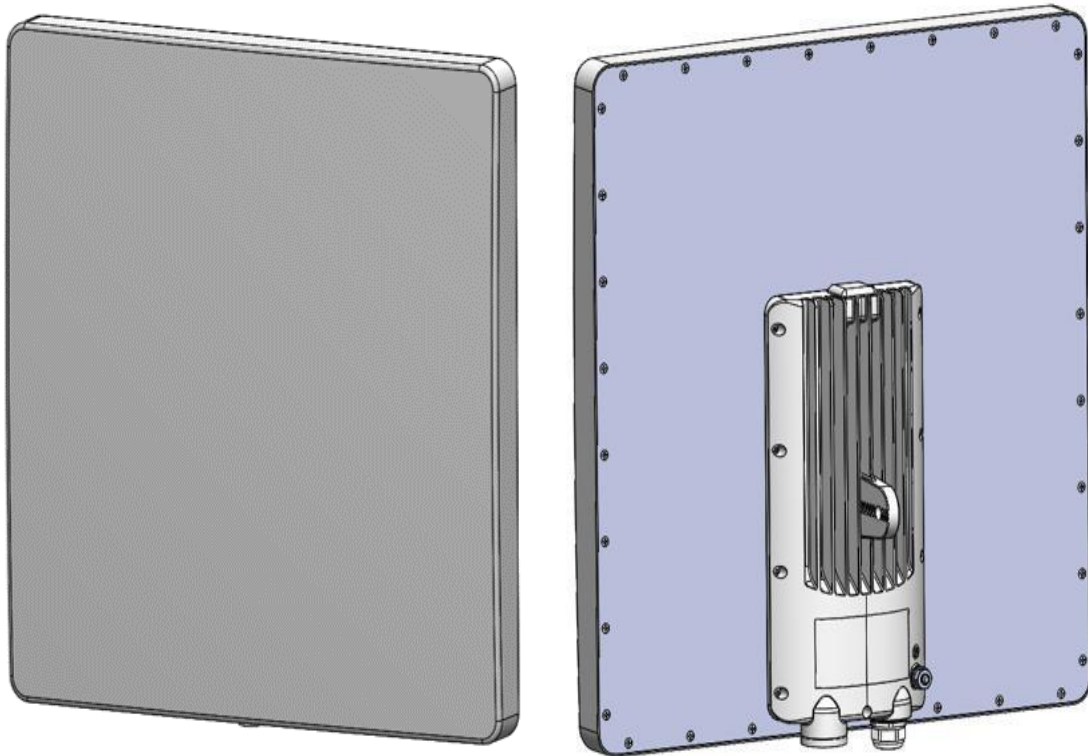
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Regulatory compliance	
Universal	FCC 47CFR Part 15.407
USA	ISED RSS-247
China	CMIIT RTA
Canada	ISED RSS-247
EU**	ETSI EN 301 893, ETSI EN 302 502
India**	WPC (India) G.S.R 1048(E) dated 22 October 2018 MTCTE TBD
Japan**	Certification Ordinances 2-1-19-5, 2-1-19-7, 2-1-19-9 (4.9GHz) Certification Ordinances 2-1-19 (2.4GHz BLE)
Safety	
EU	EN/IEC 62368-1, EN/IEC 60950-22
USA/Canada (cTUVus)	UL/CSA-C22.2 62368-1, UL/CSA-C22.2 60950-22
EMC	
USA	FCC 47CFR Part 15 Subpart B, Class B
EU**	ETSI EN 301 489-1, ETSI EN 301 489-4, ETSI EN 301 489-17 2, ETSI EN 301 489-19
Canada	ICES-003, CISPR 32 Class B
AS/NZS	CISPR 32 Class B

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Devices Diagrams



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