NetStream 3x200 D

NetStream 3x200 is a carrier-class radio that supports 3.5 GHz and complies with FCC, IC and Universal regulations (factory default: 3.5 GHz FCC/IC). This radio is part of the NetStream Series that delivers high capacity and extended range for carriers' backhaul needs.

Packing native TDM and Ethernet over a single wireless link, NetStream 3x200 provides 100 Mbps net aggregate throughput and up to 16 E1/T1 plus Ethernet.

NetStream 3x200 is connectorized for use with external antenna (2 xN-type).

Product Highlights

- 100 Mbps Ethernet net throughput and up to 16 E1s/T1s (Native TDM transport)

- Long range – up to 120 km/75 miles

- Supports intra-site and inter-site TDD synchronization to maximize network capacity

- Adaptive asymmetric throughput – dynamic allocation between uplink and downlink

- Advanced OFDM & MIMO technologies for operation in nLOS/NLOS and dense radio environments

- Robust and reliable to operate in tough conditions and extreme temperatures

Product Specifications

Configuration

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

Radio

Capacity	100 Mbps net aggregate throughput (up to 16 E1s/T1s plus Ethernet)
Range	Up to 120 km / 75 miles
Channel Bandwidth	Configurable: 5, 10 and 20 MHz (for the default band)
Modulation	2x2 MIMO-OFDM (BPSK/QPSK/16QAM/64QAM)
Adaptive Modulation & Coding	Supported
Automatic Channel Selection	Supported
DFS	Not Supported (for the default band)
Diversity	Supported
Spectrum Viewer	Supported
Max Tx Power	25 dBm
Duplex Technology	TDD
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6
Processing speed	380,000 PPS
Encryption	AES 128; FIPS 197
Support Indoor units	IDU-NetStream RM and DT; NetStream PoE devices
Bandwidth Allocation	Configurable: Symmetric or Asymmetric
QoS	Packet classification to 4 priority queues according to 802.1p and Diffserv
VLAN Support	802.1Q, QinQ, 4094 VLANs
Ethernet Ring Protection	Supported, including Ethernet 1+1
TDD Intra Site Synchronization	Supported
TDD Inter Site Synchronization	Supported through common GPS receiver per site
Monitored Hot Standby (MHS)	1+1 with NetStream link

Supported Bands

Band	Channel BW 5 MHz	Channel BW 10 MHz	Channel BW 20 MHz	Radio Compliance
3.6 GHz FCC/IC*	**3.6505 - 3.6745**	**3.650 - 3.675**	**3.650 - 3.675**	**FCC 47CFR Part 90 subpart Z; IC RSS-197**
3.5 GHz IC	3.4755 - 3.6495	3.473 - 3.652	3.468 - 3.657	IC RSS-192
3.5 GHz Universal	3.2975 - 3.8025	3.295 - 3.805	3.290 - 3.810	Universal
3.4 GHz Universal	3.3975 - 3.7025	3.395 - 3.705	3.390 - 3.710	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	<25 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	CFR47 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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