

NetStream 5x06

Point-to-Point wireless links delivering carrier class performance at the most competitive price in market

Technology Advantages

- Transmit power of 16 dBM max
- IP traffic capacity up to 12 Mbps (6 Mbps full duplex) upgradable by Software License to 36 Mbps
- Optional 5, 10 and 20 MHz channel band width
- Automatic Channel Selection for resilience against interference
- Optimized air frame to accommodate high performance on IP traffic
- Hub site synchronization facility providing the possibility of installing many links in close distances on the same tower



Key Benefits

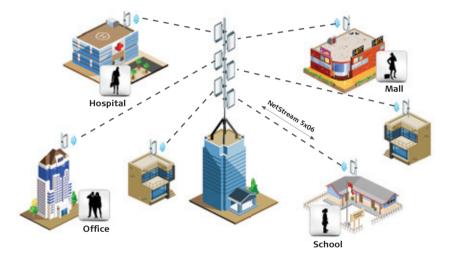
- Industry proven solution; thousands of systems installed at leading carrier sites globally
- Extremely simple to install and maintain (minimal OPEX)
- Available in license exempt frequencies, eliminating regulatory overhead and reducing network ramp-up time
- Lower cost of ownership significantly reduces both CAPEX and OPEX



NetStream 5x06 is ideally suited to meet the conectivity needs of cellular operators, service providers, enterprises and private networks, providing high capacity connectivity of up to 12 Mbps at ranges of up to 80 Km/50 miles.

Available in multiple frequency bands and configurations, the cost-effective solutions are extremely simple to install and maintain, and are typically up and running less than an hour.

Netronics NetStream 5xo6 solutions can also be installed in a unique Multiple-Point-to-Point architecture; multiple units are deployed in one hub site location, from where they provide a dedicated high-capacity connection to each remote site.



Superior range and link stability

NetStream 5xo6 can deliver stable and robust links for transfer of IP traffic over long distances. The actual range is more dependent to the installation site than to the radio characteristics. If a clear line of site is provided distances up to 120 Km/70 Miles can be achieved with lower link capacity.

Hub site synchronization

NetStream 5xo6 solutions can also be installed in a unique Multiple-Point-to-Point architecture; multiple units are deployed in one hub site location, from where they provide a dedicated high-capacity connection to each remote site. The Multiple-Point-to-Point Concept builds around Netronics unique Hub Site Synchronization (HSS) feature, which synchronizes the transmission of collocated NetStream 5xo6 radios thus removing potential interference commonly experienced with collocated TDD radios.









3 ms

Latency



%50 in each direction

5 - 10 - 20 MHz Channels

Single Polarity

Specifications

Configuration	
Architecture	Indoor Unit: POE only Outdoor Unit: ODU with integrated antenna, ODU for connection to external antenna
IDU TO ODU Interface	Outdoor CAT-5e cable; Maximum cable length: 100 m

Radio	
Frequency Bands	2.3 - 2.7 GHz 4.9 - 6.020 GHz
Data Rate	12 Mpbs (6 Mbps full duplex) Software upgradable to 36 Mbps
Channel Bandwidth	5/10/20 MHz
Duplex Technique	TDD
Modulation	OFDM-BPSK/QPSK/16QAM/64QAM
Max Tx Power	16 dbm; Configurable, Average
Received Dynamic Range	>60 dB
Error Correction	FEC;K=1/2, 2/3, 3/4
Encryption	AES 128

Ethernet Interface	
Туре	10/100BaseT Interface with Auto-negotiation (IEEE 802.3)
Number of Ethernet Ports	1,2
Framing/Coding	IEEE 802.3/U
Bridging	Self-learning up to 2047 MAC addresses IEEE 802.1Q
Traffic Handling	MAC layer bridging, self-learning
Data Latency	3 msec (typical)
Max Frame Size	2047 Bytes
Line Impedance	100 ^Ω
VLAN ID for Management	Supported
Connector	RJ-45
Ethernet Ring Protection	Supported, including Ethernet 1+1

Management	
Protocol	SNMP based; Telnet
Network Management	Kit for SNMPc and HPOV
Software Upgrade	Local and remote
Diagnostics	Local and remote loopback testing
Dimensions	

ODU	With 1ft integrated antenna: 30.5 cm(W) x 5.8 cm(D) x 30.5 cm(H) Weight: 1.5 kg/3.3 lbs
	Without antenna: 13.5 cm(W) x 4.0 cm(D) x 24.5 cm(H) Weight: 1.0 kg/2.2 lbs

Power and Mounting	
Power Feeding	100 - 240 VAC, 50/60 Hz; 20 - 60 VDC
Power Consumption	IDU-E with ODU, 10 W max IDU-C with ODU, 14 W max
Mounting	Pole or Wall
Environmental	
Outdoor Unit Enclosure	All weather cases; IP67 compliant
ODU Operating Temperatures	-35°C to 60°C /-31°F to 140°F
IDU Operating Temperatures	-5°C to 45°C / 23°F to 113°F
Humidity	ODU: Up to 100% non-condensing IDU: Up to 90% non-condensing



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