XPress™ Ethernet Bridge

900 MHz - Long Range Wireless Ethernet Bridge by MaxStream, Inc.

Features

Indoor/Urban Range (w/ 2.5 dBi antenna):	1000’
Indoor/Urban Range (w/ high gain antenna):	2000’
Outdoor LOS Range (w/ high gain antenna):	15 miles
Conducted Output Power:	125 mW

Indoor XPress Ethernet Bridge radio pair

Outdoor XPress Ethernet Bridge with high-gain Yagi antenna

- Does not interfere with Wi-Fi networks
- Highest QoS (Quality of Service) available - Synchronous point-to-point protocol enables extremely low data latency and jitter
- 128-bit encryption payload protection provides secure data delivery
- Simple Plug-and-Play: Pre-configured as matched pairs with no user programming required
- VLAN extensions supported

FCC (U.S.A.) Approved
Contact MaxStream for complete list of certifications

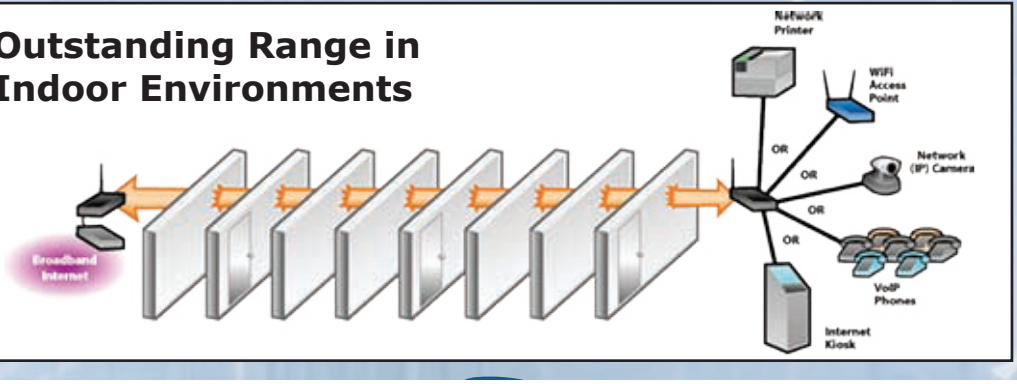
Connecting your data system to the Internet

The XPress Ethernet Bridge is the best solution when:

- Wi-Fi range is insufficient
- A broadband Ethernet drop will cost too much or is impractical to install
- Guaranteed DSL-rate throughput is required (Kiosks/Wi-Fi APs/PTZ Cameras)
- Guaranteed latency for voice or video is required (VoIP/PTZ Cameras)
- Wi-Fi is too slow due to saturation or 2.4Ghz interference (Airport/Mall/PTZ Cameras)
- An indoor long-range broadband backhaul is required

The XPress Ethernet Bridge replaces costly wiring with a solution that can enable remote Wi-Fi APs, Pan/Tilt/Zoom Security cameras, VoIP phones, Internet Kiosks and more.

Outstanding Range in Indoor Environments



Secure online ordering 24/7/365 from B&B electronics MANUFACTURING COMPANY

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XPress™ Ethernet Bridge 900 MHz Wireless Ethernet Bridge

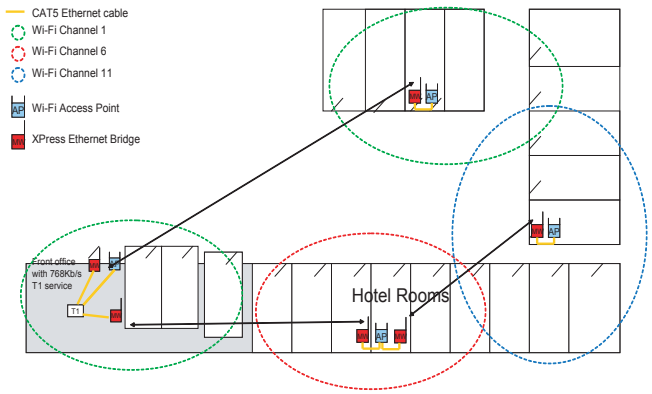
Specifications

Performance	Transmit Power Output (software selectable)	125 mW (21 dBm), 4 Watts EIRP with 15 dB antenna
	Indoor/Urban Range (w/ 2.5 dB dipole antenna)	up to 1000' (300 m)
	Indoor/Urban Range (w/ high-gain antenna)	up to 2000' (600 m)
	Outdoor RF line-of-sight Range (w/ 2.5 dB dipole antenna)	up to 2 miles (3.2 km)
	Outdoor RF line-of-sight Range (w/ high-gain antenna)	up to 15 miles (24 km)
	Throughput Data Rate	935 Kbps
	RF Data Rate	1.5 Mbps
	Receiver Sensitivity	-98 dBm (@ $10e^{-4}$ BER)
General	Frequency	ISM 902 - 928 MHz
	Spread Spectrum	DSSS (Direct Sequence Spread Spectrum)
	Encryption	128-bit Encryption
	TX Current Consumption	370 mA (@ 4.5V)
	Latency	< 1 ms - assuming a dedicated wireless link to client device
	Jitter	± 0.05 ms - depending on packet size, interference and SNR
	Channels	12 non-overlapping
	Automatic Frequency Select	Yes - radio channel automatically selected and adaptively optimized
	Manual Frequency Mode	Yes
	Status LEDs	Power, RF Link, Ethernet Link, Traffic, RF RX, RF TX, 4/Channel and 6/Link quality
	MAC Pass-through Filter	Yes - can be disabled
	Error Correction Technique	Sub-block error detection and retransmission
	Adjacent-band Rejection	>60 dB - SAW receiver filter attenuates cellular and pager interference
	Antenna Connector	RPTNC
	FCC ID (Certification Part 15.247)	R4N-MW900
	Operating Temperature Range	-40 - 70° C
	PoE (Power-over-Ethernet)	Proprietary 6V system - includes injectors and power supplies
Physical Properties	Size - Indoor	3.25" x 5.25" x 1.19" (8.26cm x 13.34cm x 3.00cm)
	Size - Outdoor	3.13" x 6.25" x 2.25" (7.94cm x 15.88cm x 5.72cm)
	Weight - Indoor	5.64 oz (160 g)
	Weight - Outdoor	10.34 oz (293 g)
	Data Connection	RJ-45
	Operating Temperature	-40 to 70° C

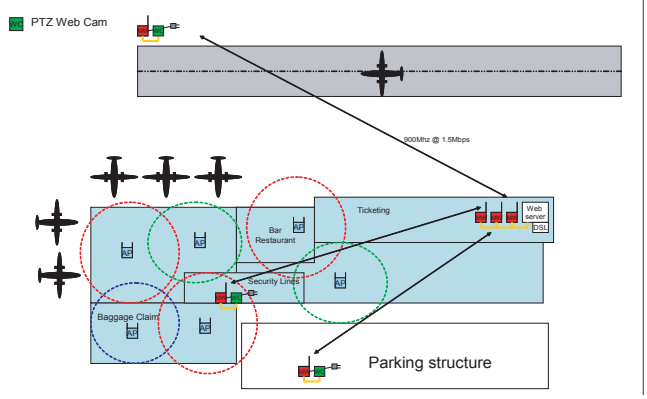
Specifications are subject to change without notice.

Sample Application Diagrams

Hotel Layout using the MaxStream Wireless Bridge



PTZ WEB Camera - A small airport that wants to differentiate from the larger Metro airport by advertising that it has shorter security lines. This will be provided by several web - controlled Pan, Tilt, Zoom cameras on the airport's marketing website.



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