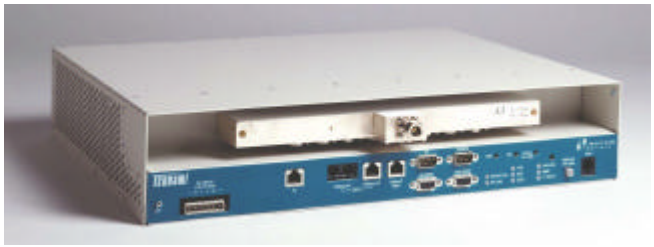
WESTERN™ Multiplex

Tsunami™



License-Free
Wireless Fast Ethernet Bridges
(100BaseT)

The Tsunami wireless bridges provide full-duplex 100BaseT (fast Ethernet) connectivity under license-free regulations (ISM). Under these regulations, these radio bridges require no frequency coordination or licensing, resulting in 'instant' connectivity of 100BaseT access for line-of-sight distances beyond 15 miles.

Tsunami 100BaseT connections transport up to 45 Mbps full-duplex (90 Mbps total) for data communications. In addition a T1 connection is provided alongside the 100BaseT connection for direct PABX connectivity for combined voice and data WANs. Additional services such as voice orderwire and auxiliary data are also provided.

Tsunami wireless bridges provide high-speed connections that are more reliable than fiber or wire. These radios provide significant cost savings compared to leased-line connections and also allow fast and easy connections where wire or fiber access is impossible or too costly.

Applications

*The Tsunami wireless bridges are ideal for backbone connections of **ISP**s and **CLEC**s to establish new points of presence. They also may be used for spurs to connect direct enterprise customers to the PoP. **Enterprises** may connect WAN and PABX connections between campus locations using the Tsunami.*

- No operating license required (in many countries)
- 45 Mbps full-duplex throughput (90 Mbps total)
- Wayside T1
- Frequency Range:
  Single Channel: 5725-5825 MHz
  Dual Channel:: 5250-5350 MHz &
  5725-5825 MHz
- Compliant with FCC (United States) Part 15.401 (U-NII) and IC (Canada) RSS-210 (LE-LAN) rules
- Point-to-point communications from less than 1 mile to more than 15 miles
- Wide DC Power Input ± 20 to ± 63 V
- Wide operational temperature
- Built-in loopback, far-end monitoring and orderwire
- 2 Year Warranty

Tsunami
License-Free Wireless Fast Ethernet Bridges (100BaseT)

Specifications and Ordering Information

System

Frequency Band (single Ch)	5725-5825 MHz
(dual Ch)	5250-5350 MHz & 5725-5825 MHz
Capacity	44.736 Mbps + T1
Antenna Connector	N-type female
Output Power (single Ch)	≥+17 dBm, +20 dBm typical
Output Power (dual Ch)	≥+10 dBm, +13 dBm typical
RF Attenuation Range	20 dB, minimum
Receiver Threshold	-79 dBm, BER=1x10^{-6}
System Gain (single Ch)	97 dB
(dual Ch)	90 dB
Maximum Receive Level	-5 dBm, error free
Regulatory Compliance	FCC Part 15.401, Class B IC RSS210

Data Interface

Fast Ethernet Interface	100BaseTX/FX
Connector	RJ45/ST
Compliance	IEEE 802.3

Auxiliary Connections

Orderwire Handset	2-wire, RJ-11
VF Orderwire Bridge	600 Ω balanced, 4 wire, 0 dBm, DB25 female
Diagnostics Port	RS-232 (craft), DB9
NMS	10BaseT (HTTP, SNMP)
Aux Data Port	RS-232/RS-422,
(Clear Service Channel)	≤ 9600 baud, DB9
Alarm Port	2 Form C, 6 TTL, DB25
Test Points	Output power, near & far-end RSL
Wayside	T1 (DSX-1) or E1[1] (CEPT-1)

Power/Environment

DC Power	±20 to ±63 Volts, <45 Watts
Optional AC Adapter	100-250 Volts, 50-60 Hz
Power Connector	6-pin barrier strip, plug in
Operational Temperature	-30 to +65°C
Humidity	0 to 95% non-condensing
Altitude	15,000 feet, maximum

Physical

Size (WxHxD)[2]	17.2 x 3.5 x 14.5 inches (2RU)
Weight	11 pounds

[1]Wayside E1 interface only available on model 27710-52
[2]19-inch EIA rack mount,2-unit height (mounting brackets supplied).

Ordering Information

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System

27710-51xxx	5.8 GHz Single Band w/T1
27710-51xxx	5.8 GHz Single Band w/E1
27700-51xxx	5.3/5.8 GHz Dual Band w/T1

AC/DC Adapter

277x0-5xxx0	Without AC adapter
277x0-5xxx1	With AC adapter

Channel Options

27710-51A1x	A1 channel	Tx=5750 MHz, Rx=5800 MHz
27710-51A2x	A2 channel	Tx=5800 MHz, Rx=5750 MHz
27700-51A1x	A1 channel	Tx=5284 MHz, Rx=5759 MHz
27700-51A2x	A2 channel	Tx=5759 MHz, Rx=5284 MHz
27700-51B1x	B1 channel	Tx=5316 MHz, Rx=5791 MHz
27700-51B2x	B2 channel	Tx=5791 MHz, Rx=5316 MHz

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Specifications subject to change without notice.