



■ OptiQwave 8200 DS3 5.8GHz Unlicensed UNII Band Digital Microwave



The OptiQwave 8200 is a license-exempt digital microwave in UNII band that provides T3 or E3 point-to-point wireless connections at the range of 10~25 km with high availability.

Using high quality radios and standard interfaces, Fiber Logic allows you to quickly add backhaul and backbone connections to your infrastructure. Because it is wireless, Fiber Logic's OptiQwave 8200 offers significant cost-savings compared to traditional leased lines. In addition, fast deployment opens up new revenue streams and enables faster customer acquisition. It also provides a time-to-market advantage when installing a leased line is too costly or impossible.

In addition, OptiQwave 8200 utilizes unlicensed frequency, so you can install it when you need it and where you need it. It eliminates regulatory delays and is a lot faster than traditional wired networks. Network management and maintenance features such as various local and remote loopbacks, built-in PRBS, LED Status Alarms, SNMP, and engineering order-wire help network providers maintain their networks for maximum service levels.

Easy installation and operation allow you to quickly extend your networks and eliminate bandwidth bottlenecks, making OptiQwave 8200 ideal for:

- Cost-effective, rapid broadband deployment in the first mile
- 2G/3G BTS, or remote station backhaul
- Redundant backup channel
- Disaster recovery
- Temporary traffic demand Service providers establishing new Points of Presence in new markets channel

Key Features

- T3 or E3 capacity interface
- License-exempt frequency
- Compliant with industry standards
- Built-in loopbacks, far-end monitoring
- Range up to 25 km
- Simple configuration reduces technician time and lowers installation costs
- Ease of maintenance reduces operational costs

Specification

System

Frequency Range	5725~5825 MHz for USA 5725~5875 MHz for Europe
RF Channel Bandwidth	25 MHz~34MHz
Modulation	QPSK, 8PSK
System Capacity	
Digital Capacity	1x DS3
Wayside Channels	1x T1
Antenna Connector	N-Type female
RF Output Power	+17 dBm typical
RF Attenuation Range	24 dB, minimum (S/W adjustable)
TX Frequency Stability	± 10 ppm
RX Sensitivity	-76 dBm (BER=1×10 ⁻⁶)
Maximum RX Level	-10 dBm with Error Free
System Gain	93 dB
Range	1 to 25 Km

DS3 Interface

Line Rate	44.736 Mbps
Line Code	B3ZS
Frame Structure	Complied with ANSI TI-102
Jitter Generation	< 0.01 UI (rms)
Jitter Tolerance	Complied with ITU-T G.825
Connector	Electrical: BNC female, 75 ohm

T1 Interface

Line Rate	1.544MHz±20ppm
Line Code	B8ZS/AMI
Impedance	100Ω ± 5% resistive, symmetrical pair.
Pulse Shape	Complied with ITU-T G.703
Jitter Requirement	Complied with ITU-T G.823
Framing Format	Unframed (Transparent)
Connector	RJ 45

Auxiliary Connections

Orderwire Handset	2-wire, RJ-11
Test Points	Near End Tx & Rx Signal Level Voltage
Auxiliary Data Port	RS-232, Clear Service Channel, up to 38.4 Kbps
Console Port	RJ45, up to 38.4 Kbps
Network	RJ45, 10/100BaseT
Management Port	Ethernet
Modem Port	RS-232 for External MODEM
Office Alarm Port	DB-9, Dry contact relay

Performance Monitoring

Data Collection	DS3 : CV, ES, SES, UAS T1 : CV, ES, SES, UAS
Data Storage	15-minute, 95 15-minute 1 day and 7 days
Data Reporting	LCD, Console & Ethernet
Threshold Crossing Notification	Automatically generated and reported to Console and OS

Power/Environment

Power	DC : -36~-72VDC AC : 90~260 VAC, 47~63 Hz With auto-sensing
Power Consumption	<100 Watts
Operating	-10~+50
Temperature	
Humidity	0~95%, non-condensing
Physical size(WxDxH)	445 × 326 × 88 mm
Weight	7.5 kg
Mounting	19 and 23 inch EIA rack mount
Regulatory Compliance	FCC Part 15, Class A CISPR EN55022
Reliability	> 40,000 hours, FITs

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