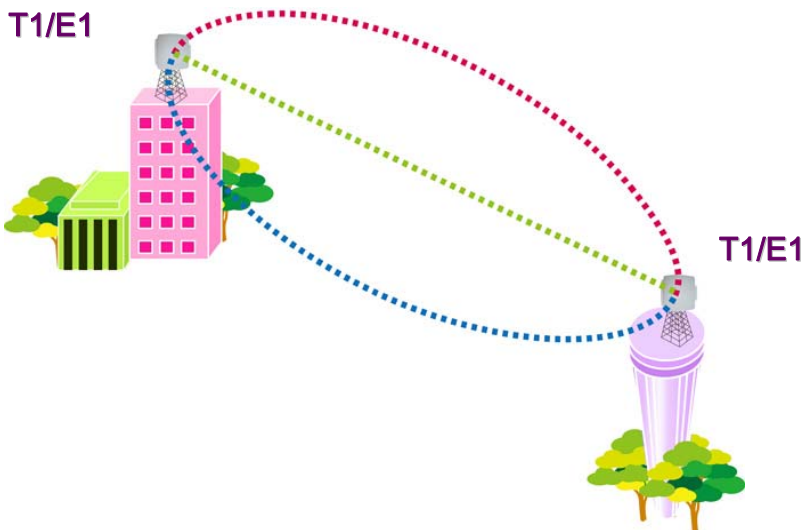




## 5GHz FDD Radio System for E1/T1 Bridge OA1800 Series P2P Outdoor Backhaul Bridge Ultra Low Latency OA1800

OA1800 series of all outdoor bridge are designed for point to point application. These bridges with functions of PoE (Power over Ethernet) power supply, waterproof, dustproof and coolant can build up a low packet latency and high bandwidth connection between two buildings. Such marvelous products are so suitable to be set up outdoors. Radio in the OA1800 series support capabilities ranging from 1.6 Mbps to an industry-leading 120 Mbps of aggregate user throughput, and 100BaseT interfaces. Featuring native FDD and native Ethernet transport and full software configurability and upgradeability, the OA1800 series was designed to meet demanding backhaul requirements of enterprise organizations and service providers seeking the performance benefits of an all-outdoor configuration.

**Security, Management and Data Networking.** The OA1800 series deliver the highest data and management security available with 128-bit AES encryption and secure SNMP v2 management, together with enhanced fault management and diagnostic features. The 802.1Q VLAN option provides built-in network administration and security flexibility.



**System OA1800**

Frequency Bands (GHz) 5.725-5.825

Tuning Resolution 1 MHz

Output Power (full power)

5725-5850 MHz band +25 dBm BPSK1/2, +20dBm 64QAM3/4

Power Control Step Size 1 dB

Receiver Threshold (BER=10<sup>-6</sup>)

20 MHz

40 MHz

64QAM 3/4

-70

-68

64QAM 1/2

-75

-73

16QAM 3/4

-78

-76

16QAM 1/2

-82

-80

QPSK 3/4

-84

-82

QPSK 1/2

-86

-84

BPSK 3/4

-88

-86

BPSK 1/2

-90

-88

Throughput (Mbps)

70

125

Non-overlapping Channels

5725-5850 MHz band

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## Configuration and Management

WEB GUI	Navigating the GUI
SNMP	SNMP v1/v2/v3 support options
VLAN	<p>If any VLANs are configured in addition to the management VLAN, the radio automatically discards traffic that not matching a configured VLAN. Non-tagged traffic, or traffic with tags matching VLANs that are not configured, do <i>not</i> flow across the radio link.</p> <p>Up to 16 unique VLANs can be configured. VLAN ID numbering ranges from 1 to 4094. The Native (default) VLAN ID can be changed from the default setting.</p> <p>Every configured VLAN can also have a logical name to help track the function of each VLAN.</p>
QoS	802.1P (Ethernet)

## Diagnostic and Testing

Ethernet Loopback	
No Loopback	Default
External Local Loopback	External loopback modes are used in conjunction with an external test source
External Remote Loopback	External loopback modes are used in conjunction with an external test source
Internal Loopback	<p>Internal loopback uses an internal test source, and sends the test source signal across the link, looped at the remote radio's interface, returned to the local radio, and looped at the local radio's interface back to the source. The inputs at both ends are looped back at the line level.</p>
PING Remote Birdge	
Device Discovery	(TBD)
Protocol Stack	SNMP, HTTP, UDP, TCP, IP v4, DNS,

System (Continue)	
Maximum RSL	-15 dBm error free ..... 0 dBm no damage
Maximum Packet Size	1514 bytes
Data Security	128-bit AES encryption .....
Packets Per Second	20,000+ packets/s
End to End Packet Latency	<1ms



Physical	
Physical Configuration	Outdoor Unit (ODU)
Dimensions (H x W x D)	300 x 250 x 80 (mm)
Antenna	1x External N Jack
Operation Temperature	-20 to +75 °C; -4 to 167°F
Full Specification Temperature	-20 to +70 °C; -4 to 158°F
Weight	2.6 kg
Environmental	NEMA 4/IP67
Altitude	14000 ft/4267 m
Humidity	100% condensing

Interface	
Ethernet	RJ-45(F) .....
Speed	10/100BaseT (POE) .....
Duplex	Half, Full, Auto-MDIX .....
Compliance	802.3
DC Power	48VDC, <20W

