



Flex4G-LITE (ANSI)

## Spectrum-Efficient 3Gbps Links

The BridgeWave **Flex4G-LITE (ANSI)** is an all outdoor, IP radio system operating in the 71-86GHz frequency band with capacities up to 3Gbps using 64QAM modulation. Supporting both POE and direct DC feed, this compact radio system features carrier-grade Ethernet switch functionality, hitless adaptive rate modulation, and low power consumption.

To reduce deployment costs and improve field flexibility, BridgeWave **Flex4G-LITE (ANSI)** includes a 2.5GbE port that can also be configured for CPRI operation.

BridgeWave **Flex4G-LITE (ANSI)** is available with externally mounted 30cm, 60cm, or 90cm antennas for ultra-long range.

The BridgeWave **Flex4G-LITE (ANSI)** enables network operators to meet exponentially-increasing backhaul requirements and is field-proven with thousands of links already in use worldwide.

## Performance

- Spectrum efficient using 64QAM in 250, 500, and 750MHz wide channels
- Full-duplex providing up to 3Gbps upstream and downstream
- Hitless adaptive rate and modulation
- QPSK/8PSK/16/32/64QAM modulation support
- Highest system gain
- Internal carrier grade L2 switch
- Built-in 2.5GbE support
- Optional CPRI support (Modes 1 - 4)
- SyncE and IEEE1588v2 compliant
- Power over Ethernet and Direct DC
- Extreme ranges supported with optional 30cm (43.8dBi), 60cm (51dBi), and 90cm (54dBi) external slip-fit antennas
- Small form factor and lightweight
- Quick and simple deployment

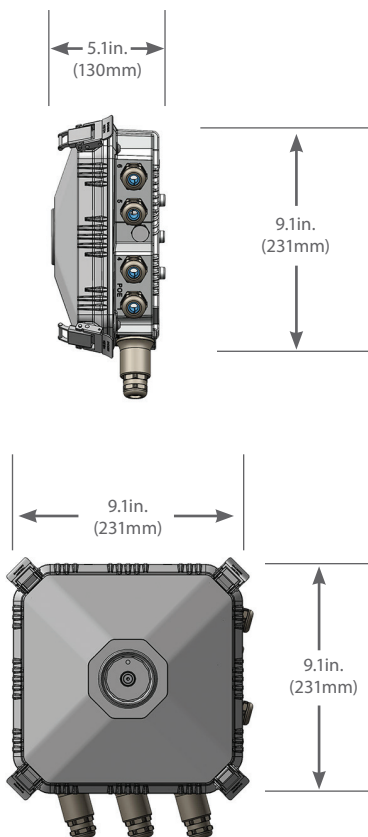
## Applications

- 4G/LTE backhaul for access and aggregation
- Last-mile fiber extension for enterprises
- Temporary high capacity links for disaster recovery
- LAN extensions

## FLEX4G-LITE (ANSI) SPECIFICATIONS

### Dimensions

#### Flex4G-LITE (ANSI)



\*Dimensions are for Flex4G-LITE only without installed parabolic antenna.

Data Throughput Rate	Up to 3000Mbps per 1+0 terminal, Up to 6000Mbps per 2+0 terminal				
Configurations	1+0 Non-Protected; 2+0 Dual Path Transmission utilizing Orthogonal Mode Transducer, OMT				
Frequency Range	71-76GHz / 81-86GHz				
Air Interface	Full Duplex FDD				
RF Channel Tuning	Frequency Agile in 125MHz steps				
Channel Bandwidths	250, 500, and 750MHz				
Management	In-Band				
Latency	<50µs @ 64QAM with 1024 byte packets				
Modulation	QPSK/8PSK/32QAM/64QAM Hitless Adaptive Code and Modulation				
System Performance	Modulation	Throughput	System Gain		
			43.8dBi Antenna	51dBi Antenna	54dBi Antenna
@ 250MHz Channel BW	64QAM	1000Mbps	160dB	176dB	179dB
	32QAM	833Mbps	163dB	179dB	127dB
	16QAM	666Mbps	168dB	184dB	187dB
	8PSK	500Mbps	171dB	187dB	190dB
	QPSK	333/166Mbps	176/179dB	192/195dB	195/198dB
@ 500MHz Channel BW	64QAM	2000Mbps	157dB	173dB	176dB
	32QAM	1666Mbps	160dB	176dB	179dB
	16QAM	1333Mbps	165dB	181dB	184dB
	8PSK	1000Mbps	168dB	184dB	187dB
	QPSK	666/333/166Mbps	173/176/179dB	189/192/195dB	192/195/198dB
@ 750MHz Channel BW	64QAM	3000Mbps	155dB	171dB	174dB
	32QAM	2500Mbps	158dB	174dB	177dB
	16QAM	2000Mbps	163dB	179dB	182dB
	8PSK	1500Mbps	172dB	188dB	191dB
	QPSK	1000/666/333/166Mbps	171/173/176/179dB	187/189/192/195dB	190/192/195/198dB
<b>Interfaces</b>					
Ethernet: 2 x SFPs for 1 x 2.5G/1G & 1 x 1G SFP + 4 x RJ45 10/100/1000Base-T CPRI: 1 x Option 1 to 4 (614.4Mbps to 3072.0Mbps)					
<b>Ethernet</b>					
Max Packet Size	9600 bytes (Jumbo Frame Compatible)				
Ethernet Timing and Synchronization	SyncE (G.8261), IEEE 1588v2 (Transparent Clock)				
Features	<ul style="list-style-type: none"> <li>IPv6, IPv4</li> <li>L2- 8192 MAC Address</li> <li>4096 VLAN (IEEE 802.1Q)</li> <li>VLAN tag translation on ingress or egress</li> <li>Provider Bridging (IEEE 802.1ad, Q-in-Q)</li> <li>RSTP / MSTP</li> </ul>				
<b>Ethernet QoS</b>					
Classification	<ul style="list-style-type: none"> <li>8 QoS queues per port with SP or DWRR scheduling</li> <li>TCAM classification and remarking</li> <li>DSCP translation, ingress and egress</li> <li>Per Queues and Per Port policing and shaping</li> <li>Full Duplex Flow control</li> </ul>				
Protection	ITU-T G.8032 Ring				
OAM	ITU-T Y.1731				
<b>Antennas</b>					
<ul style="list-style-type: none"> <li>External 30cm, 43.8dBi gain, 0.9° beamwidth</li> <li>External 60cm, 51 dBi gain, 0.4° beamwidth</li> <li>External 90cm, 54 dBi gain, 0.3° beamwidth</li> </ul>					
<b>Mechanical and Environmental</b>					
Input Power Requirements	-48VDC, PoE, 30W typical (32W Max) power consumption				
Weight	2.9 kg / 6.4lb				
Temperature Range	-50°C to +60°C (-58° to +140° F)				
Weather	IP67 / All Weather				
Safety	IEC 60950-1, -22				
Regulatory RF Certification	US FCC Part 101, FCC Part 15B; ETSI EN 302 217				

Note: Specifications are typical and subject to change without notice.

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