



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

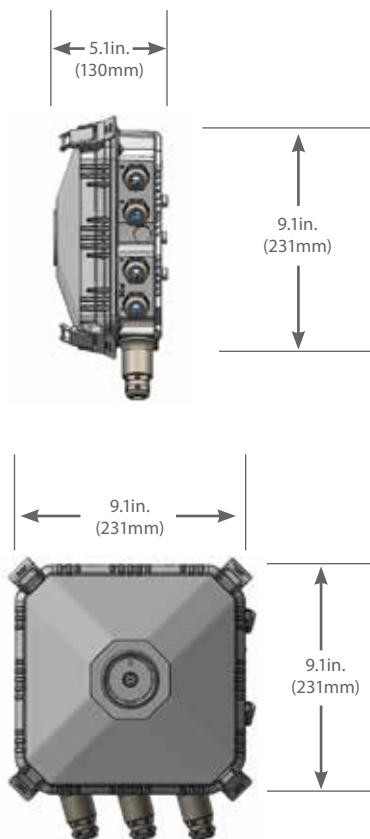
Applications

- 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
Interfaces					
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)					
Ethernet					
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"> IPv6, IPv4 L2- 8192 MAC Address 4096 VLAN (IEEE 802.1Q) VLAN tag translation on ingress or egress Provider Bridging (IEEE 802.1ad, Q-in-Q) RSTP / MSTP 				
Ethernet QoS					
Classification	<ul style="list-style-type: none"> 8 QoS queues per port with SP or DWRR scheduling TCAM classification and remarking DSCP translation, ingress and egress Per Queues and Per Port policing and shaping Full Duplex Flow control 				
Protection	ITU-T G.8032 Ring				
OAM	ITU-T Y.1731				
Antennas					
<ul style="list-style-type: none"> External 30cm, 43.8dBi gain, 0.9° beamwidth External 60cm, 51 dBi gain, 0.4° beamwidth External 90cm, 54 dBi gain, 0.3° beamwidth 					
Mechanical and Environmental					
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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