Horizon Compact 24 GHz Unlicensed

DragonWave's Horizon Compact packet microwave solution can be deployed without licensing cost in the 24 GHz unlicensed (UL) band, delivering all the same features and functionality of DragonWave's licensed solutions.

Solution highlights:

- **24 GHz UL is the only "near interference-free" band:**
  - Reserved exclusively for point-to-point microwave and medial applications
  - Free of the device clutter (from cordless phones, garage openers, multi-point systems, wireless LANs and other consumer devices) found in other unlicensed frequencies such as the 2.4 GHz ISM and 5.8 GHz U-NII bands.
  - The Horizon antenna beamwidth is extremely narrow (<2°), making interference from another 24 GHz UL system very unlikely.
  - The shorter distance travelled by 24 GHz signals (relative to 2.4 and 5.8 GHz) results in a much lower noise floor.
- **Significant spectrum cost savings for operators:**
  - With spectrum accounting for up to 30% of total cost of ownership for backhaul networks, operators can achieve significant cost saving by deploying in the 24 UL frequency exempt band.
- **Fast and simple deployment:**
  - Packet microwave solutions are already known for their rapid deployment benefits. By eliminating the spectrum licensing process, operators can be up in running in a matter or hours.
- **Performance & Reach:**
  - Horizon delivers sub 0.1 ms latency compared to up to 8 ms latency for unlicensed Time Division Duplex (TDD) systems.
  - 24 GHz UL links can reach up to 2.5 KM in Europe and up to 5 KM in North America.

Throughput, transmit power and receive sensitivity data:

Modulation	Throughput (Mbps)	Tx Power (dBm) by Antenna Diameter												Rx Sensitivity
		FCC				IC				ETSI				
		30cm	60cm	75cm	120cm	30cm	60cm	75cm	120cm	30cm	60cm	75cm	120cm	
QPSK	57	5	3	0	-3	-1	-1	-1	-1	-17	-22	-25	-28	-81
16 QAM	111	5.5	1	-2	-5.5	-1	-1	-1	-1	-17	-22	-25	-28	-76
32 QAM	142	5.5	1	-2	-5	-1	-1	-1	-1	-17	-22	-25	-28	-73
64 QAM	181	4.5	0	-3	-6.5	-1	-1	-1	-1	-17	-22	-25	-28	-69
128QAM	212	4	-0.5	-3.5	-7	-1	-1	-1	-1	-17	-22	-25	-28	-67
256 QAM	277	4	-0.5	-3.5	-6.5	-1	-1	-1	-1	-17	-22	-25	-28	-60

(40 MHz Channel)