

# HORIZON COMPACT

## High Capacity Wireless Ethernet System



### Frequencies

6 GHz	FCC/IC/ETSI/ITU
7 GHz	ETSI/ITU/MX
8 GHz	ETSI/ITU
11 GHz	FCC/IC/ETSI/ITU
13 GHz	ETSI/AUS/NZ/ITU
15 GHz	IC/ETSI/AUS/NZ/MX/ITU
18 GHz	FCC/IC/ETSI/AUS/NZ/ITU
23 GHz	FCC/IC/ETSI/AUS/NZ/ITU/MX
24 GHz UL	FCC/IC/ETSI
24 GHz DEMS	FCC/IC
26 GHz	ETSI
28 GHz	FCC/ETSI
32 GHz	ETSI
38 GHz	FCC/ETSI/AUS/NZ/MX

### Mechanical

Radio/Modem (without antenna)	12 cm x 23.6 cm x 23.6 cm; 5.2 kg 4.75 in x 9.3 in x 9.3 in; 11.5 lbs
Antenna Wind Loading	112 kph (70 mph) Operational 200 kph (125 mph) Survival
Antenna Mount Adjustment	+/- 45° Az; +/- 22° El

### Payloads

Interface	1000/100/10 BaseT
Latency 100 BT	< 400µs, Typical < 200µs FastE
Latency GigE	< 200µs, Typical 120µs GigE
Packet Size	64 to 1600 Bytes, up 9600 (GigE Mode)
Flow Control	Yes (GigE mode only)
802.1p	Yes – 8 levels served by 4 queues
802.1q	Yes
Modulation Shifting	Yes

### Power

Input	-36 VDC to -60 VDC
Optional Adapter	110/240 VAC
Consumption	25 Watts (per link end) 54 Watts High Power (per link end)

### Connections

Power	-48V, POE
Payload (+ Inband NMS)	RJ45 or optical LC
NMS (when out-of-band)	RJ45

### Network Management (NMS)

Alarm Management	SNMP Traps, Enterprise MIB
NMS Compatibility	Any SNMP based network manager SNMP v1, v2 c and v3
Security	3 Level Authentication
EMS	Web Based Management System, SSL HTTP, SSH, Radius, Telnet

### Environmental

Operating Temperature	-40°C to +50°C [-40°F to +122° F] STD Pwr With heat shield -40°C to +60°C [-40°F to +140° F]
Humidity	100 % Condensing
Altitude	4500 m (14,760 ft)
Water Tightness:	Nema4X, IP56 (directed hose test)
Operational Shock:	ETSI 300-019-1-4; 5g 11ms
Operational Vibration:	ETSI 300-019-1-4 Class 4m5, NEBS GR-63
Earthquake:	NEBS GR-63

Note: add 3 dB to HP TX power shown in table for 6-8 GHz products

Modulation	50 MHz			40 MHz			30 MHz		
	Throughput	TX Power	RX Sensitivity	Throughput	TX Power	RX Sensitivity	Throughput	TX Power	RX Sensitivity
QPSK	67	17/27	-81	57	17/27	-81			
16 QAM	110	14.5/24.5	-77	111	15/25	-76			
32 QAM	171	14/24	-72	142	13/23	-73	107	13/23	-75
64 QAM	215	12.5/22.5	-68	181	10.5/20.5	-69			-72
128 QAM	271	11/21	-62	212	10/20	-67	165	10/20	-68
256 QAM	322	11.5/21.5	-59						
256 QAM	371	9.5	-59	277	9.5/19.5	-60	212	9.5/19.5	-62
256 QAM	364	19.5	-59						

Modulation	Throughput	20 MHz		10 MHz			56/55 MHz		
		TX Power	RX Sensitivity	Throughput	TX Power	RX Sensitivity	Throughput	TX Power	RX Sensitivity
QPSK				14	27	-87	65	17/27	-80
16 QAM	28	27	-84	22	24.5	-84	111	14.5/24.5	-76
32 QAM	54	23	-80				216	11/21	-70
64 QAM	71	23	-77	48	21.5	-74			
128 QAM	108	20.5	-70				290	10.5/20.5	-62
256 QAM	142	19.5	-64	65	21	-68	385	9.5/19.5	-59

Modulation	Throughput	28 MHz		14 MHz			7 MHz		
		TX Power	RX Sensitivity	Throughput	TX Power	RX Sensitivity	Throughput	TX Power	RX Sensitivity
QPSK	37	17/27	-85						
QPSK	48	13.5/23.5	-84	23	13.5/23.5	-87	11	17/27	-88
16 QAM	71	13/23	-80	36	13/23	-84	18	11.5/21.5	-86
32 QAM	100	11/21	-75	47	13/23	-78			
64 QAM							33	10.5/20.5	-78
128 QAM	144	10.5/20.5	-68	70	10.5/20.5	-72	39	10/20	-74
256 QAM	190	9.5/19.5	-64	95	9.5/19.5	-68			

Note: add 3 dB to HP TX power shown in table for 6-8 GHz products  
 2 dB Tx Power reduction for 28 GHz HP, 256 QAM  
 SP/HP shown for Tx Power  
 Throughput based on random packet size  
 Throughput approximately 20% higher @ minimum packet size  
 Not all modes may be available in all channel sizes  
 Preliminary data – may be subject to change

### Connect with us today!

600-411 Legget Drive  
 Ottawa, Ontario, Canada, K2K 3C9  
 Tel: 613-599-9991 | Fax: 613-599-4225  
[nasales@dragonwaveinc.com](mailto:nasales@dragonwaveinc.com)  
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[www.dragonwaveinc.com](http://www.dragonwaveinc.com)

