

Electrical

Ports	4 x Low Band Ports for 698-896 MHz	
Frequency Range	698-709 MHz	824-896 MHz
Gain <sup>1</sup>	14.0 dBi	14.6 dBi
Gain (Average) <sup>2</sup>	13.2 dBi	13.7 dBi
Azimuth Beamwidth (-3dB)	74°	63°
Elevation Beamwidth (-3dB)	13.0°	11.1°
Electrical Down tilt	2° to 12°	2° to 12°
Elevation Side lobes (1st Upper)	<-19 dB	<-19 dB
Front-to-Back Ratio @180°	> 34 dB	> 34 dB
Front-to-Back Ratio @20°	> 30 dB	> 30 dB
Cross-Polar Discrimination at Peak	> 25 dB	> 25 dB
Cross-Polar Discrimination at Sector <sup>2</sup>	13.0 dB	10.5 dB
Cross-Polar Port-to-Port Isolation	> 25 dB	> 25 dB
Voltage Standing Wave Ratio (VSWR)	< 1.5:1	< 1.5:1
Passive Intermodulation (2x20W)	≤ -153 dBc	≤ -153 dBc
Input Power Continuous Wave (CW)	500 watts	500 watts
Polarization	Dual Linear 45°	Dual Linear 45°
Input Impedance	50 ohms	50 ohms
Lightning Protection	DC Ground	DC Ground

<sup>1</sup>Peak gain across sub-bands

<sup>2</sup>Electrical specifications follow document "Recommendation on Base Station Antenna Standards" (BACTM V9.6)

Ports	4 x High Band Ports for 1895-2400 MHz			
Frequency Range	1895-1880 MHz	1895-1990 MHz	1920-2190 MHz	2300-2400 MHz
Gain <sup>1</sup>	17.4 dBi	17.7 dBi	18.1 dBi	18.4 dBi
Gain (Average) <sup>2</sup>	16.7 dBi	16.9 dBi	17.1 dBi	17.3 dBi
Azimuth Beamwidth (-3dB)	70°	69°	60°	54°
Elevation Beamwidth (-3dB)	5.7°	5.2°	4.8°	4.1°
Electrical Down tilt	0° to 8°	0° to 8°	0° to 8°	0° to 8°
Elevation Side lobes (1st Upper)	<-16 dB	<-17 dB	<-16 dB	<-17 dB
Front-to-Back Ratio @180°	> 35 dB	> 35 dB	> 35 dB	> 35 dB
Front-to-Back Ratio @20°	> 32 dB	> 32 dB	> 32 dB	> 32 dB
Cross-Polar Discrimination at Peak	> 20 dB	> 19 dB	> 20 dB	> 20 dB
Cross-Polar Discrimination at Sector <sup>2</sup>	11.2 dB	9.5 dB	9.5 dB	8.6 dB
Cross-Polar Port-to-Port Isolation	> 25 dB	> 25 dB	> 25 dB	> 25 dB
Voltage Standing Wave Ratio (VSWR)	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1
Passive Intermodulation (2x20W)	≤ -153 dBc	≤ -153 dBc	≤ -153 dBc	≤ -153 dBc
Input Power Continuous Wave (CW)	300 watts	300 watts	300 watts	300 watts
Polarization	Dual Linear 45°	Dual Linear 45°	Dual Linear 45°	Dual Linear 45°
Input Impedance	50 ohms	50 ohms	50 ohms	50 ohms
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground

<sup>1</sup>Peak gain across sub-bands

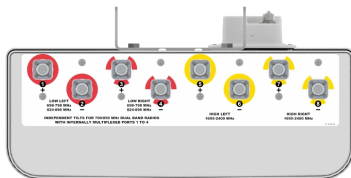
<sup>2</sup>Electrical specifications follow document "Recommendation on Base Station Antenna Standards" (BACTM V9.6)

Mechanical

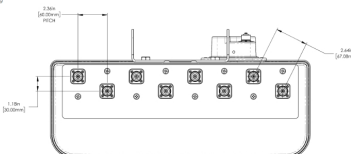
Dimensions (LxWxD)	71.2x207x7.7 in (1808x525x197 mm)
Survival Wind Speed	> 150 mph (1-201 kph)
Front Wind Load	325 lbs (1446 N) @ 100 mph (161 kph)
Side Wind Load	144 lbs (642 N) @ 100 mph (161 kph)
Equivalent Flat Plate Area	12.7 sq ft (1.17 m <sup>2</sup> )
Weight*	96.0 lbs (43.6 kg)
Connector	Ø x 4.3-10 female
Mounting Pole	2 to 9 in (5 to 22 cm)

\*Weight includes mounting

Bottom View



Connector Spacing

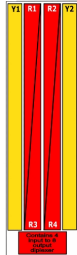


RET to Element Configuration

DSMP5R-BL50A Element and RET configuration (Type 1, Element RET)

Top of antenna

Viewed from rear



RET placement

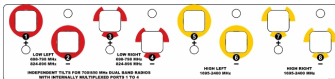
as viewed from rear of antenna

Top of antenna



Array	Ports	Freq (MHz)	Ports controlled by controller	RET location on antenna	AISG RET UID
R1	1, 2	698-709	1, 2, 3, 4	Top (D00 RET)	Clxxxxxxxxx M.1
R2	3, 4	824-896	1, 2, 3, 4	Top (D00 RET)	Clxxxxxxxxx M.2
R3	1, 2	1824-1896	1, 2, 3, 4	Top (D00 RET)	Clxxxxxxxxx M.3
R4	3, 4	1824-1896	1, 2, 3, 4	Top (D00 RET)	Clxxxxxxxxx M.4
Y1	5, 6	1895-2400	5, 6, 7, 8	Bottom	Clxxxxxxxxx M.5
Y2	7, 8	1895-2400	5, 6, 7, 8	Bottom	Clxxxxxxxxx M.6

Port Label



Typical Antenna Patterns

For detailed information on additional antenna patterns, contact customer support at support@eccproducts.com

