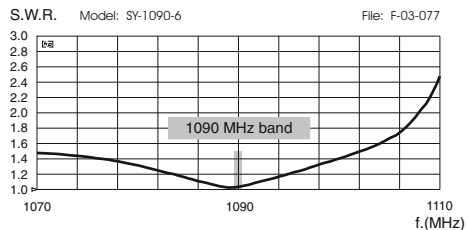


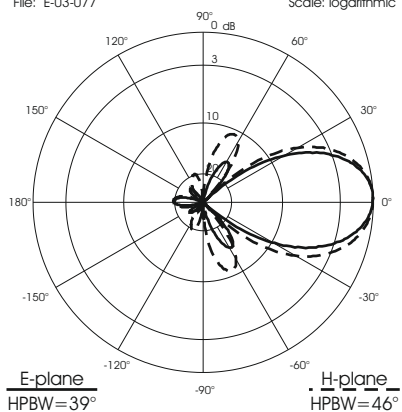
SY 1090-6

TYPICAL S.W.R. RESPONSE

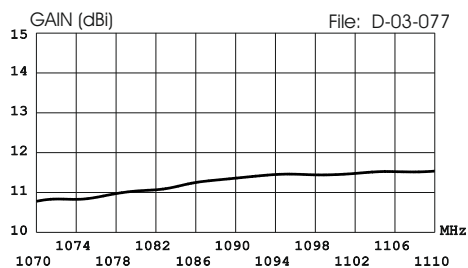


TYPICAL RADIATION PATTERN at 1090 MHz

File: E-03-077 Scale: logarithmic

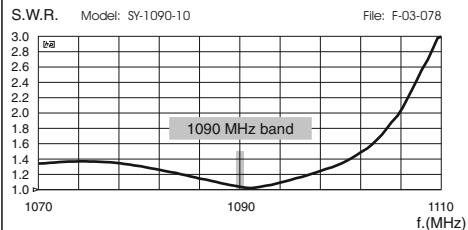


TYPICAL GAIN DIAGRAM vs FREQUENCY



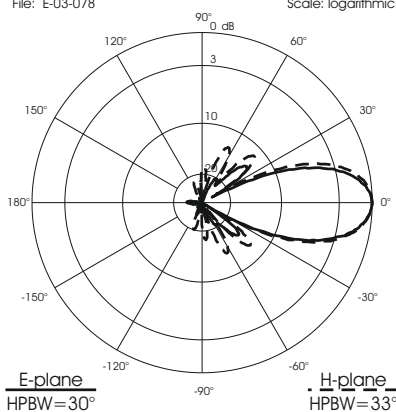
SY 1090-10

TYPICAL S.W.R. RESPONSE

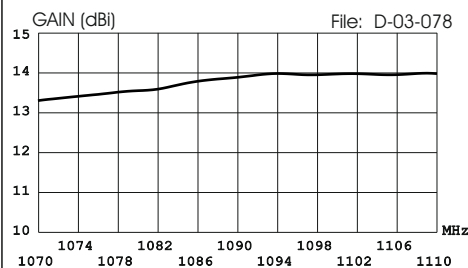


TYPICAL RADIATION PATTERN at 1090 MHz

File: E-03-078 Scale: logarithmic

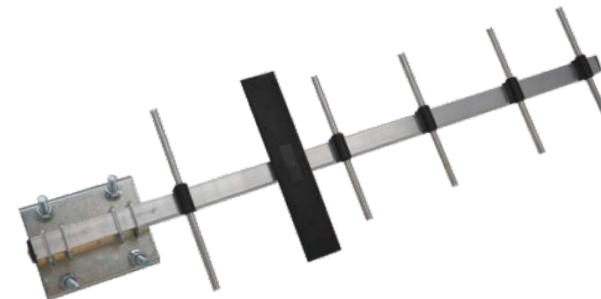


TYPICAL GAIN DIAGRAM vs FREQUENCY



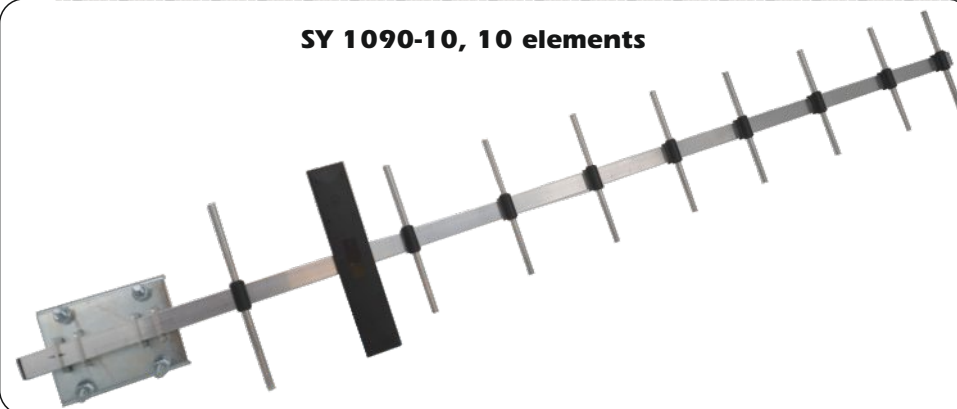
SY 1090-6 SY 1090-10

Base Station Yagi Antennas ADS-B 1090 MHz



SY 1090-6, 6 elements

SY 1090-10, 10 elements



SPECIFICATIONS

Electrical Data	SY 1090-6	SY 1090-10
Type	6 elements yagi antenna	10 elements yagi antenna
Frequency Range	1090 MHz (ADS-B)	
Impedance	50 Ω	
Radiation (H-plane) Beamwidth @ -3 dB	46°	33°
Radiation (E-plane) Beamwidth @ -3 dB	39°	30°
Radiation angle deg.	0°	
Front to back ratio	≥ 19 dB	≥ 30 dB
Polarization	Linear Vertical	
Max Gain	11.5 dBi	14 dBi
Cross Polarization Isolation	≥ 30 dB	≥ 40 dB
Max Power (CW) @ 30° C	10 Watts	
Grounding Protection	All metal parts are DC-grounded, the inner conductor shows a DC-short	
Connector	FME-male	

Mechanical Data

Housing & Radome Material	Aluminium, PCB, Thermoplastic	
Bracket & Hardware Material	Galvanized Steel	
Wind Load	31 N @ 150 Km/h; 93 mi/h	44 N @ 150 Km/h; 93 mi/h
Wind Resistance	180 Km/h; 112 mi/h	150 Km/h; 93 mi/h
Wind Surface	0.019 m ² ; 0.20 ft ²	0.027 m ² ; 0.29 ft ²
Dimensions (approx.)	145 x 505 x 60 mm; 5.7 x 20 x 2.4 in	145 x 905 x 60 mm; 5.7 x 35.6 x 2.4 in
Turning radius (approx.)	480 mm; 19 in	880 mm; 35 in
Weight (approx.)	460 gr; 1 lb	610 gr; 1.4 lb
Operating Temperature	-20° C to +80° C	
Installation type	Mast: Ø 25-42 mm; Ø 1- 1.65 in with U-bolt	

MOUNTING INSTRUCTIONS

