

# Yagi Antenna

150 - 174 MHz & 220 - 222 MHz / 9.5 dBd Gain

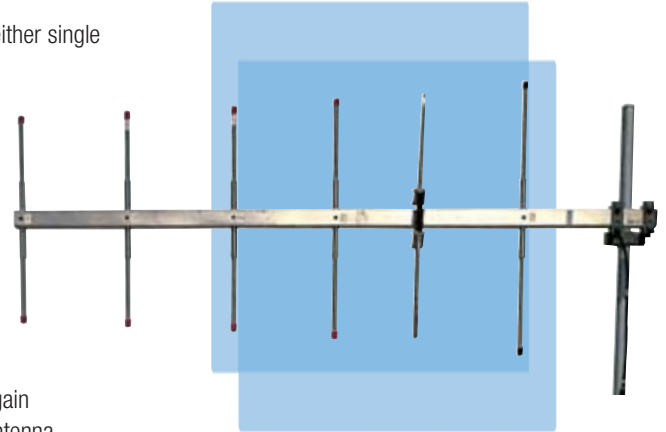


DB 292

30-512 MHz

**D**B292, a 6-element Yagi, is constructed with a reflector, four directors and a folded dipole driven element mounted on a common boom.

- **Broad Bandwidth** — 10 MHz gives optimum performance in either single or multi-frequency systems.
- **Weather Resistant** — The feed is enclosed within the dipole assembly for added protection from ice and snow.
- **Lightning Resistant** — All elements are grounded.
- **Stacked Arrays** — Two antennas provide 12.5 dBd gain, four antennas 15.5 dBd. A vertical spacing of 0.75 to 1.0 wavelengths between antennas is recommended.
- **Key Applications** — The DB292 is ideal for systems in need of broadband coverage, protection against severe environments, high gain in a narrow sector or reduced interference on the backside of the antenna.
- **No Field Tuning** — Antenna is adjusted at the factory for minimum VSWR.
- **Rugged** — DB292 is made of aluminum alloys and reinforced with 0.875" (22.26 mm) sockets at the boom. Brackets and hardware are galvanized steel.



● DB292

## ELECTRICAL DATA

<b>Frequency Ranges</b> – MHz	A = 150-160 B = 155-165, C = 164-174
<b>Bandwidth</b>	Same as above
<b>VSWR</b>	1.5 to 1 or less
<b>Nominal Impedance</b> – Ohms	50
<b>Forward Gain</b> (over half-wave dipole) – dBd	9.5
<b>Polarization</b>	Vertical
<b>Maximum Power Input</b> – Watts	350
<b>Vertical Beamwidth of Single Antenna</b> (half-power)	50°
<b>Horizontal Pattern of Beamwidth of Single Antenna</b> (half-power)	62°
<b>Front-to-Back Ratio</b> – dB	18
<b>Lightning Protection</b>	Direct ground
<b>Standard Termination</b>	Captive Type N-Male attached to end of flexible lead.

## ORDERING INFORMATION

Use model number for correct frequency and specify termination if non-standard. Brackets and clamps are supplied. **Examples:** DB292-A, or 2 ea. DB292-A plus 1 ea. 14292-2-A for dual array. Order jumper cable separately.

Gain	Order
9.5 dB	1 ea. DB292 Antenna
12.5 dB	2 ea. DB292 Antenna
15.5 dB	4 ea. DB292 Antenna

## MECHANICAL DATA

	DB292	DB292 (two)	DB292 (four)
<b>Support Boom</b> (aluminum) – in. (mm)	1.5 (38.1) x 2 (50.8) with 0.078 (1.98) wall	1.5 (38.1) x 2 (50.8) with 0.078 (1.98) wall	1.5 (38.1) x 2 (50.8) with 0.078 (1.98) wall
<b>Elements</b> (aluminum) – in. (mm)	0.75 (19.05) dia. with 0.875 (22.23) diameter sockets	0.75 (19.05) dia. with 0.875 (22.23) diameter sockets	0.75 (19.05) dia. with 0.875 (22.23) diameter sockets
<b>Dipole</b> (aluminum) – in. (mm)	0.625 (15.88) dia.	0.625 (15.88) dia.	0.625 (15.88) dia.
<b>Maximum Exposed Area</b> (flat plate equivalent) – ft <sup>2</sup> (m <sup>2</sup> )	1.8 (0.167)	3.6 (0.335)	7.2 (0.669)
<b>Lateral Thrust at 100 mph</b> (161 km/hr) – lbf (N)	72 (320.3)	144 (640.5)	288 (1281)
<b>Wind Rating:</b> *			
<b>Survival without Ice</b> – mph (km/hr)	100 (161)	100 (161)	100 (161)
<b>Survival with 0.5" (12.7 mm) Radial Ice</b> – mph (km/hr)	70 (113)	70 (113)	70 (113)
<b>Height</b> – in. (mm)	38 (965.2)	110 (2,794)	254 (6,452)
<b>Overall Length</b> – in. (mm)	84 (2,134)	84 (2,134)	84 (2,134)
<b>Net Weight</b> – lbs. (kg)	15 (6.8)	32 (14.51)	68 (30.84)
<b>Shipping Weight</b> – lbs. (kg)	19 (8.62)	41 (18.60)	81 (36.74)
<b>Mounting Brackets</b>	Galvanized steel	Galvanized steel	Galvanized steel

\* Calculation of wind survivability does not include damage due to flying debris.