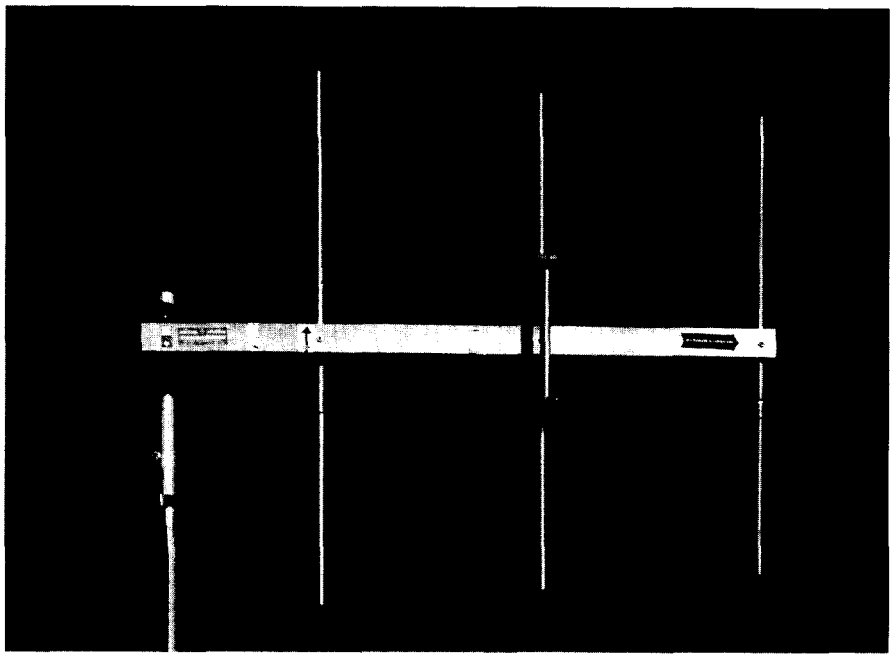
A 3-element Yagi antenna, the DB230 gives 7 dBd maximum forward gain combined with good front-to-back ratio.

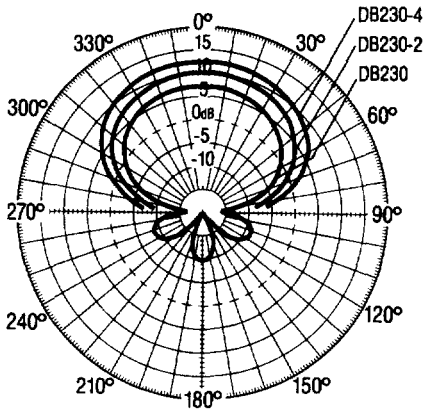
- **Stacked Arrays** – Two antennas provide 10 dB gain and four antennas 13 dBd gain. A vertical spacing of .75 to 1.0 wavelengths between antennas is recommended.
- **Key Applications** – The DB230 is ideal for mobile systems that need gain in one sector, stations located along a coast or with geographical boundaries, point-to-point systems, and systems to reduce interference on the backside of the antenna.
- **Rugged** – Antennas operate effectively in severe environments. Elements are made of .75" (19.05 mm) tubing and reinforced with .875" (22.23 mm) sockets at the boom. The size and thickness of the materials are increased for larger antennas; heavy duty clamps and orientation brackets are also supplied.
- **Lightning Resistant** – Constructed of all metal with direct grounding makes the antenna almost immune to lightning.
- **No Field Tuning** – Antenna is adjusted at the factory for minimum VSWR.

Ordering Information – Specify exact frequency and termination if non-standard. Order DB230 for a single antenna, DB230-2 for 2-antenna array, and DB230-4 for 4-antenna array. Clamps, phasing harnesses for arrays, and orientation brackets (for larger models) are included. Other size clamps are available. Order DB365-W Clamp for mounting on a wooden pole. Order jumper cable separately, if desired.



DB230

Electrical Data	
Frequency Ranges – MHz A = 30-41, B = 41-46, C = 46-50, E = 72-76, H = 145-150, J = 150-160, JJ = 220-222, K = 160-173, L = 173-174	
VSWR Bandwidth 3%, using center frequency of each band	2 to 1 VSWR
VSWR Bandwidth 1%, using center frequency of each band	1.5 to 1 VSWR
Nominal impedance – ohms	50
Gain (over half-wave dipole) – dBd	7.0
Maximum power input – watts	500
Horizontal beamwidth (half power points)	76°
Front to back ratio – dB	17
Lightning protection	Direct ground
Standard Termination: Captive Type N-Male attached to end of flexible lead.	



DB230 Horizontal Radiation Pattern

Mechanical Data				
	35 MHz	50 MHz	74 MHz	160 MHz
Support boom (aluminum) – in. (mm)	2x3 (50.8x76.2) with .125 (3.18) wall	2x3 (50.8x76.2) with .125 (3.18) wall	2x2 (50.8x50.8) with .125 (3.18) wall	1.5x2 (38.1x50.8) with .078 (1.98) wall
Elements (aluminum) – in. (mm)	.750 (19.05) diameter	.750 (19.05) diameter	.750 (19.05) diameter	.750 (19.05) diameter
Bracket	Half-Y type (018234-001), Gal. steel 2 (50.8) OD	Half-Y type (018234-001), Gal. steel 2 (50.8) OD	Half-T type (018188-001), Gal. steel 2 (50.8) OD	Aluminum angle Welded to boom
Wind rating:*				
Survival without ice – mph (km/hr)	110 (177)	over 125 (201)	over 125 (201)	over 125 (201)
Survival with .5" (12.7 mm) radial ice – mph (km/hr)	75 (121)	100 (161)	over 125 (201)	over 125 (201)
Lateral thrust at 100 mph (161 km/hr) – lbf (N)	189 (840.6)	159 (707.2)	91 (404.8)	37 (164.6)
Height (vertical) – ft. (m)	13.6 (4.15)	9.7 (2.96)	6.6 (2.01)	3.0 (.91)
Length (horizontal) – ft. (m)	10.5 (3.2)	8.0 (2.44)	6.5 (1.98)	3.4 (1.04)
Net weight (w/clamps, brackets) – lbs. (kg)	57 (25.84)	52 (23.59)	27 (12.25)	11 (4.99)
Shipping weight (w/clamps) – lbs. (kg)	90 (40.82)**	88 (39.92)	40 (18.14)	26 (11.79)
Mounting clamps	Galvanized steel	Galvanized steel	Galvanized steel	Stainless steel

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

**Portion of mount shipped separately.