Direction Finding (DF) Antenna Systems

DF antennas are available with a wide selection of band breaks, RF outputs (switched), polarizations, enclosures, and mounts. Some examples of our DF antennas are:

A. **DFA-126/F2**, a rotating dish with two feeds:

Frequency	1 to 26.5 GHz (1 to 18 GHz and 18 to 26.5 GHz)
Polarization:	Linear, Adjustable (manual or remote controlled)
VSWR:	2.5 : 1
Gain:	10 to 45 dB
3 dB Beamwidth:	35 to 1.5 degrees
Pedestal:	EL/AZ
Controller Type:	ACU-3
Reflector Size:	24”
Assembly:	Transportable in a carrying case, 15 minutes, 1 person

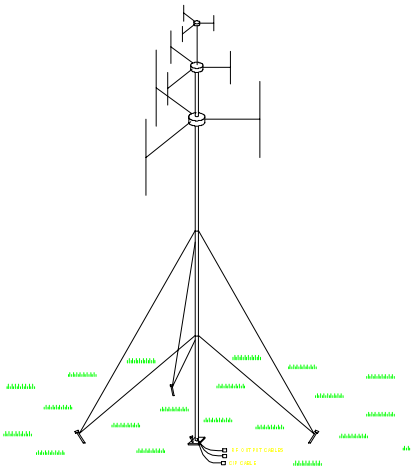
B. **DFA-1240/F3**, multiple horn feeds with a portable reflector. This design eliminates the need for rotary joints.

Frequency:	12 to 40 GHz
Number of Bands:	Three (Ku, K, and Ka)
Polarization:	Circular
VSWR:	2.5 : 1
Gain:	18 to 26 dBic
3 dB Beamwidth:	20 to 10 degrees
Squint, Boresight:	± 1.0 degrees
Positioner:	Azimuth
Controller Type:	ACU-3
Size:	15” wide and 21” Height (excluding positioner)

Direction Finding Antenna Systems (cont'd….)

C. **DFA-0213/B3**, portable DF antenna system using broadband antenna elements and optimized for light weight, sensitivity, accuracy, and repeatability.

FREQUENCY:	20 to 1300 MHz (Usable from 1 to 1300 MHz)
NUMBER OF BANDS:	Three (20 to 90 MHz, 90 to 400 MHz, 400 to 1300 MHz)
VSWR:	2 : 1
BAND SWITCHING:	Remote
MAST:	Collapsible
MAST MATERIAL:	Fiberglass Composite
AZIMUTH PATTERN:	Omnidirectional
PATTERN FLATNESS:	±3 dB over 360 ^{o}
GAIN VARIATION IN EACH BAND:	±6 dB
POLARIZATION:	Vertical
IMPEDANCE:	50 Ohms
RF ISOLATION, ELEMENT-TO-ELEMENT	
SAME BAND:	80 dB
DIFFERENT BAND:	40 dB
ASSEMBLY:	Collapsible, No tools required
STORAGE:	Travel bag
WEIGHT:	< 15 lbs.
MAXIMUM COMPONENT SIZE:	36”
INPUT VOLTAGE:	+ 24 Vdc



	LOW BAND FREQUENCIES					MID BAND FREQUENCIES				HIGH BAND FREQUENCIES			
FREQUENCY (MHz)	10	20	30	45	90	90	200	300	400	400	600	900	1200
ABSOLUTE MIN.GAIN(DB)	-33	-25	-20	-15	-4	-25	-15	-8.5	-4.5	-21	-16	-10	-7

D. **DFA-120**, fixed DF antenna system covering a frequency range from 100 MHz to 2 GHz, vertical and horizontal polarizations. DFA-120 produces sum and difference radiation pattern for highly accurate direction finding.

E. **DFA-350**, Antenna System offering a frequency range of 100 MHz to 5 GHz suitable for receiving both horizontal and vertical polarization. This antenna is also suited for generating sum and difference radiation pattern for direction finding.