

TA-1020 Dual Band Sector

The TA-1020 antenna is a dual band slant polarized sector designed with field adjustable electrical downtilt at both the cellular and PCS operating bands. The antenna consists of a broadband patch array on an aluminum base with a UV stabilized ASA radome for superior weatherability.

Electrical Specifications

Frequency Range: 824-894 / 1710-2170 MHz
Gain: 16.5 dBi @ 824-894 MHz, 17 dBi @ 1710-2170 MHz
VSWR: 1.5:1 max.
Polarization: Dual slant +45 and -45
Power: 400 Watts @ 824-894 Mhz, 200 Watts @ 1710-2170 Mhz

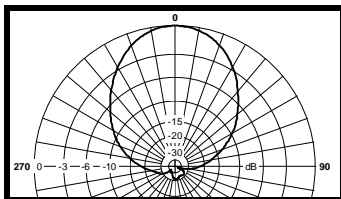
Azimuth Beamwidth: 65° +/- 5°
Elevation Beamwidth: 14° @ 824-894 MHz, 7° @ 1710-2170 MHz
Front to Back Ratio: 25 dB @ 824-894 MHz, 25 dB @ 1710-2170 MHz
Cross Pol. Discrimination: N/A

Electrical Beamtillt: 2° - 10° adjustable
Null Fill: TBD
Port to Port Isolation: 25 dB
3rd Order I.M.(2x20W): -150 dBc
Axial Ratio: N/A

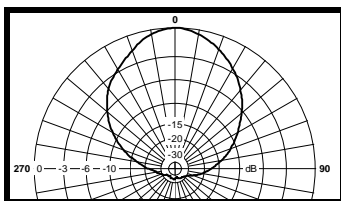
Impedance: 50 ohms nominal
Termination: 2 x 7/16 female

Radiation Patterns/Masks

H-Plane @ 824-894 MHz



H-Plane @ 1710-2170 MHz



Mechanical Specifications

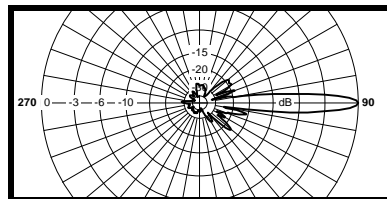
Length: 96 in. (2438 mm)
Diameter: N/A
Width: 13 in. (330 mm)
Depth: 8 in. (203 mm)
Weight: 37.5 lb. (17 kg) without hardware
Rated Wind Velocity: 125 mph (200 km/h)
Horizontal Thrust at rated wind: 542 lb. (245 kg)
with radome: N/A

Mechanical Tilt: 0 - 6 degrees
Mounting Pipe: 1.75 - 4.5 in. (44.5 - 114 mm)

Material Specifications

Radiating Elements: Plated copper on PCB
Reflector: Irridited aluminum
Radome: Gray UV stabilized ASA
Mounting Hardware: HDG and EDZ steel

E-Plane @ 824-894 MHz



E-Plane @ 1710-2170 MHz

