



AWS 4.9 GHz Sector Antennas

For new Municipal & Public Safety Band



- Weatherproof for outdoor use; compact and attractive for inbuilding
- High gain performance (17 dB - 22dB)
- Available in 30°, 60°, 90° and 120° sector
- Adjustable tilt pole mount; optional wall mount adapter

AWS's new AWS Series sectorized panel antennas are excellent for deploying point to multipoint applications in the new 4.9 public safety band. The panel antenna is a single band design that uses the latest PCB technology for high performance, lower cost and compact size.

Models are available in several sector sizes with different gain factors. Model AWS22-4900-30 provides 22 dB gain with a 30 degree sector. Model AWS19-4900-60 provides 19 dBi gain, and a corresponding 60 degree sector. Model AWS17-4900-90 provides 17 dBi gain, and a corresponding 90 degree sector. Model AWS16-4900-120 provides a slightly reduced gain of 16 dBi, yet offers a generous 120 degree sector. Multiple configurations can be used to provide increased capacity, target coverage area or omni coverage. Front to back ratio is maintained at better than 25 dB. This allows true sectorization, or to isolate services to different government branches.

Because these antennas are compact, moderate pole mounting configurations can be used for easy network deployment. An adjustable tilt pole mounting bracket allows simple alignment. The mount allows for either fixed tilt positions, or continuous adjustable tilt slot.

Pole mounted, the antenna can be adjusted up to 60° downtilt. An optional wall mount adapter is also available. The antenna is housed in a very attractive white ABS plastic. Compact in size, 12.5" H x 3" W (32 cm x 7.6 cm) this antenna will be unobtrusive in any indoor or outdoor environment. These antennas are 100% weatherproof and can withstand the harshest conditions.

The antenna terminates with an integral Female N connector. AWS can provide cable assemblies (jumpers) in a variety of cable types. External lightning protection is recommended (to protect the radio) for out-door antenna use.

Antenna Model Numbers

Model	Gain	Sector Size
AWS16-4900-120	16 dBi	120 degree sector
AWS17-4900-90	17 dBi	90 degree sector
AWS19-4900-60	19 dBi	60 degree sector
AWS22-4900-30	22 dBi	30 degree sector

Models include adjustable tilt pole mount. Connector is N female. Jumper cables are also available, built to order.

Specifications

Frequency:	4.94 - 4.99 GHz
Gain:	See model table
Bandwidth@2:1 VSWR:	See above
Impedance:	50 Ohm nominal
Max Power:	25 watts
Beamwidth:	
AWS16-4900-120	120 degree Az, 10° EI
AWS17-4900-90	90 degree Az, 10° EI
AWS19-4900-60	60 degree Az, 10° EI
AWS22-4900-30	30 degree Az, 10° EI
Front to Back Ratio:	25 dB or better
Lightning Protection:	External recommended
Max Wind Velocity:	125+ mph (200 kph)

Operating Temp:	-40° to +85° C
Material:	White ABS radome
Dimensions:	12.5" H x 3" W (all models) 32 cm x 7.6 cm
Weight:	1 lbs (0.45 kg)
Mounting:	Pole & Surface mount with U-Bolts supplied
Bracket:	Powder Coated aluminum with anodized U-Bolts
Tilt Adjustment:	Up to 60 degree down tilt
Connector:	Integral Female N
Custom jumper cables are available upon request.	