

# PerforMax™

## Dual polarized wideband variable electrical downtilt antenna for 3G rollouts

**World's first wideband variable electrical downtilt antenna with field-retrofit control system.**

Now system operators have new options for 3G system rollouts. New PerforMax dual polarized variable electrical downtilt antennas from Andrew Corporation provide continuous coverage of GSM 1800, US PCS and 3G UMTS frequency bands, all in one slender package.

Cell coverage can now be tailored by the hour or by the season, all with one antenna.

The state-of-the-art PerforMax antenna effectively reduces the number of different antennas required by allowing an operator to adjust the electrical downtilt without switching antennas. This feature allows an operator to modify the cell coverage in a fraction of the time and cost. This wideband dual polarized system adds to the existing patented Teletilt™ variable electrical downtilt systems offered by Andrew.

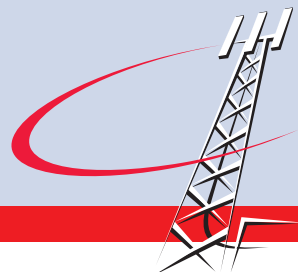
PerforMax wideband antennas permit operators to cover the frequency range from 1710 to 2170 MHz. The antennas also offer a totally new solution for dual band systems expected in many new 3G rollouts. Along with reduced inventory and maintenance needs, 3G operators will benefit by being able to roll current GSM 1800 services onto the new antenna used for 3G.

PerforMax antennas' slim profile is pleasing to the eye. Visual impact is even further reduced by a wrap-around radome, which can easily be painted in the field to local requirements. The included mechanical mount is easy to assemble and provides continuous downtilt adjustment to 12 degrees.



### Features

- For new or existing 3G operators
- Wideband frequency coverage: 1710 to 2170 MHz
- Dual polarized for polarization diversity operation
- Continuously variable electrical downtilt: 0° to 7°
- Azimuth beamwidth of 65°
- Nominal gain of 16 dBd
- Optional control system for remote or local motorized operation
- Mechanical mount included, adjustable to 12 degrees of downtilt
- Aesthetically-pleasing slim design
- Compact and lightweight: 173 by 89 mm envelope at only 6.0 kg



## Specifications for PerformMax™ dual polarized wideband variable electrical downtilt antenna UMWD-06516-XDM

**Antenna Type:** UMWD-06516-XDM.

**Description:** 65° azimuth beamwidth, 16 dBd gain, variable electrical downtilt, dual polarized GSM 1800/PCS1900/UMTS band panel antenna

### Electrical Specifications

Frequency band, MHz	1710–2170
Gain, dBd (dBi)	15.6 (17.8)
Azimuth beamwidth, degrees	65
Elevation beamwidth, degrees	6.0
Polarization type	Dual, slant 45
Port to port Isolation, dB	>30
Downtilt, degrees	Variable, 0 to 7
Impedance, ohms	50
Return Loss, dB (VSWR)	>14.0 (<1.5:1)
Front to back ratio, dB	>25
Maximum Input Power, watts	200
Lightning Protection	DC Ground
Connector/position/number	7-16 DIN female/bottom/2

### Mechanical Specifications

Dimensions L x W x D, mm (in)	1383 (54.4) x 173 (6.8) x 89 (3.5)
Weight, kg (lb)	6.0 (13.2)
Radome Material	UV Protected PVC
Radome Color	Gray

### Environmental Specifications

Survival Wind Speed, km/h (mph)	201 (125)
Wind Load - Frontal, N (lb/f)	448 (101)*
Wind Load - Lateral, N (lb/f)	110 (25)*
Wind Load - Back, N (lb/f)	448 (101)*
Temperature Range	-40° C to + 65° C
Humidity	Up to 100%
Mounting Hardware	Mounting bracket included/ part #600691A-2 with metric hardware

\*Based on 161 km/h (100 mph)

Contact your Andrew Representative for other specifications for the UMWD-06516-XDM.

### Coming soon from Andrew!

#### Optional control system for local or remote motorized operation of downtilt

The optional control system is the first and only one of its kind in the world! The control system will allow local or remote motorized control of the electrical downtilt. With this after-market field retrofit-able option an operator can optimize the cell site without ever being on site.

**ANDREW® Complete RF Path Solutions**

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