STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@po.state.ct.us
www.ct.gov/csc

March 24, 2006

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **EM-VER-057-093-043-159-047-060310** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify existing telecommunications facilities located at 1111 East Putnam Avenue, Greenwich; 153 Forbes Avenue, New Haven; 886 Main Street, East Hartford; 100 Great Meadow Road, Wethersfield; and 232 South Main Street, East Windsor, Connecticut.

Dear Attorney Baldwin:

At a public meeting held on March 22, 2006, the Connecticut Siting Council (Council) acknowledged your notice to modify these existing telecommunications facilities, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the condition that the replacement antennas are painted a color to match the existing building at the East Hartford site.

The proposed modifications are to be implemented as specified here and in your notice dated March 10, 2006, including the placement of all necessary equipment and shelters within the tower compounds. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to existing facility sites that would not increase tower heights, extend the boundaries of the tower sites, increase noise levels at the tower site boundaries by six decibels, and increase the total radio frequencies electromagnetic radiation power densities measured at the tower site boundaries to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. These facilities have also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on these towers.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to any of these facilities will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Pamela B. Katz, P.E.
Chairman

PBK/laf

See Attached List.

G:\EM\BAM-VERIZON\GREENWIC\dc032206(multiplesites).DOC

CSC
CONNECTICUT SITING COUNCIL

List Attachment

c: The Honorable James A. Lash, First Selectman, Town of Greenwich
Diane Fox, Planning & Zoning Director, Town of Greenwich
The Honorable Melody A. Currey, Mayor, Town of East Hartford
Michael J. Dayton, Town Planner, Town of East Hartford
The Honorable Linda L. Roberts, First Selectman, Town of East Windsor
Laurie Whitten, Town Planner, Town of East Windsor
The Honorable John Destefano, Jr., Mayor, City of New Haven
Frank Gargiulo, Zoning Administrator, City of New Haven
The Honorable Russell A. Morin, Mayor, Town of Wethersfield
Peter Gillespie, Town Planner, Town of Wethersfield
James A. Balch, Balch Communications
Christopher B. Fisher, Esq., Cuddy & Feder LLP
Michele G. Briggs, New Cingular Wireless PCS, LLC
Thomas F. Flynn III, Nextel Communications, Inc.
Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP
Christine Farrell, T-Mobile

ROBINSON & COLE LLP

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

March 21, 2006

Via Hand Delivery

S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **EM-VER-057-093043159047060310**
886 Main Street, East Hartford, Connecticut

Dear Mr. Phelps:

With respect to the above-referenced exempt modification filing, I wanted to inform you and the Council that I have spoken with Mike Dayton, East Hartford's Town Planner regarding this existing cell site location. I told Mr. Dayton that I would confirm with the Council that the replacement antennas Cellco proposes to install will be painted to match the color of the existing building.

If you have any specific questions regarding this filing please do not hesitate to contact me.

Sincerely,

Kenneth C. Baldwin

KCB/kmd
cc: Sandy M. Carter
Michael J. Dayton

ROBINSON & COLE LLP

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
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kbaldwin@rc.com
Direct (860) 275-8345

ORIGINAL

EM-VER-057-093-043-159-047-060310

March 10, 2006

Via Hand Delivery

RECEIVED
MAR 10 2006
CONNECTICUT
SITING COUNCIL

S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Antenna Swap**
1111 East Putnam Avenue, Greenwich, CT
153 Forbes Avenue, New Haven, CT
886 Main Street, East Hartford, CT
100 Great Meadow Road, Wethersfield, CT
232 South Main Street, East Windsor, CT

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility at each of the above referenced locations. In its continuing effort to improve the quality and reliability of its wireless service, Cellco intends to replace and upgrade the cellular antennas at each of these existing facility locations. With the exception of the East Windsor facility, each of these facilities are roof-top telecommunications facilities. The Connecticut Siting Council ("the Council") approved the establishment of these facilities when the Council had jurisdiction over roof-top installations and, as such, maintains continuing jurisdiction over these facilities.

Greenwich

The Council originally approved this facility on February 26, 1990. On July 13, 2004, the Council approved Cellco's request to replace six of its cellular antennas with six PCS antennas. Cellco now intends to modify this facility further by replacing the remaining six cellular antennas with six newer model cellular antennas at the same location on the building. Attached behind Tab 1 are specifications for the existing and proposed replacement antennas as well as a structural letter for the East Putnam Avenue facility.

New Haven

The Council originally approved this facility on September 22, 1990. On August 30, 1994, the Council approved Cellco's request to replace its cellular antennas. Cellco now intends to modify this facility further by replacing six cellular antennas with six newer model antennas at the same location on the building. Attached behind Tab 2 are specifications for the existing and proposed replacement antennas as well as a structural letter for the Forbes Avenue facility.

East Hartford

The Council originally approved this facility on August 9, 1994. Cellco now intends to modify this facility by replacing four of the cellular antennas with four newer model cellular antennas at the same location on the building. Attached behind Tab 3 are specifications for the existing and proposed replacement antennas as well as a structural letter for the Main Street facility.

Wethersfield

The Council originally approved this facility on March 11, 1991. On January 26, 2001, the Council approved Cellco's request to replace six of its cellular antennas with six PCS antennas. Cellco now intends to modify this facility further by replacing the remaining six cellular antennas with six newer model cellular antennas at the same location on the building. Attached behind Tab 4 are specifications for the existing and proposed replacement antennas as well as a structural letter for the Great Meadow Road facility.

East Windsor- Tower

The Council originally approved this facility on August 6, 1997. On April 19, 2005, the Council approved Cellco's request to replace three of its cellular antennas with PCS antennas. Cellco now intends to modify this facility further by replacing the remaining nine cellular antennas with nine newer model cellular antennas at the same 144-foot level on the tower. Attached behind Tab 5 are specifications for the existing and proposed replacement antennas as well as a structural letter for the South Main Street facility.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the chief elected official of each affected municipality.

The planned modifications to each facility falls squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in any increase in the overall height of the existing structures. Cellco's replacement antennas will be located at the same heights and locations as the existing antennas.

2. The proposed modifications will not affect associated equipment areas and will not require the extension of the site boundaries.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more.

4. The proposed modifications will not result in changes to radio frequency (RF) power density levels at either facility. Therefore, no new Power Density Calculation Tables are provided.

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the each of the above-referenced telecommunications facilities constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Kenneth C. Baldwin

Enclosures

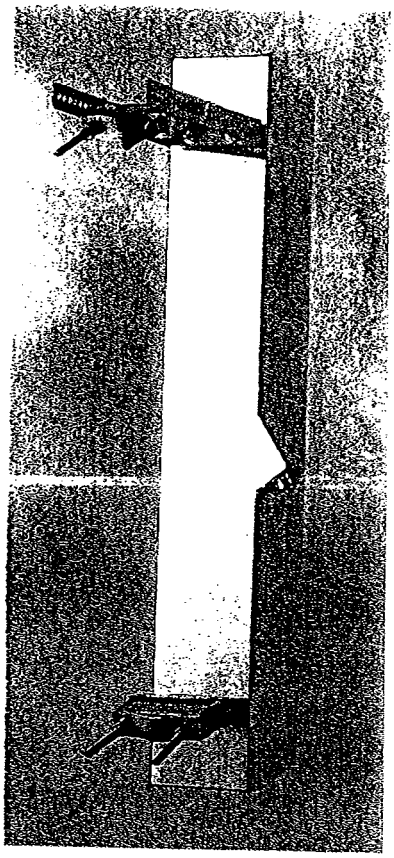
cc: James Lash, Greenwich First Selectman
John DeStefano, Jr., New Haven Mayor
Melody A. Currey, East Hartford Mayor
Bonnie L. Therrien, Wethersfield Town Manager
Linda Roberts, East Windsor First Selectman
Sandy M. Carter
Michelle Kababik

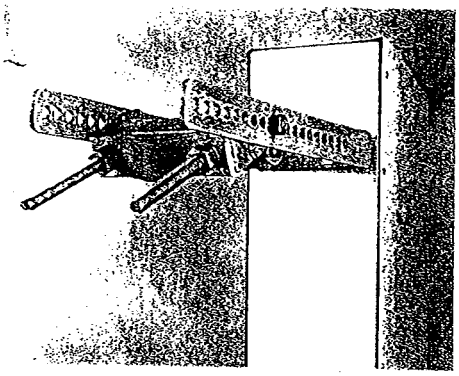
ALP-E 9011-Din

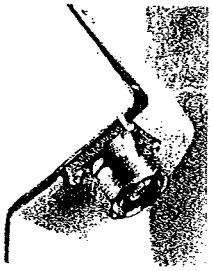
Enhanced Log-Periodic Antenna

Features:

- ❑ Small Size
- ❑ Aesthetically Pleasing
- ❑ Suitable For TDMA/CDMA
- ❑ High Return Loss
- ❑ Low Intermodulation
- ❑ High FTB
- ❑ Broadbanded
- ❑ Side-lobe Suppression
- ❑ Sturdy Design
- ❑ Down-Tilt Brackets Incl.







The distance between the center of the bolts (on the back of the antenna) are shown in the drawing above.

Bolt diameter is: **3/8-16** [comes with lock nut].

Frequency Range:	800-900 MHz
Impedance:	50 ohm
Connector Type:	7/16 Din
Return Loss:	20 dB
Polarization:	Vertical
Gain:	> 11 dBd
Front To Back Ratio:	> 30 dB
Side-Lobe Suppression:	18 dB
Intermodulation (2x25W):	IM3 > 146 dB
	IM5 > 153 dB
	IM7/9 > 163 dB
Power Rating:	500 W
H-Plane (-3 dB point):	85 - 92°
V-Plane (-3 dB point):	16 - 18°
Lightning Protection:	DC Grounded

Overall Height:	43 in	[1092 mm]
Width:	6.5 in	[165 mm]
Depth:	8 in	[203 mm]
Weight Including Tilt-Brackets:	20 lbs	[9.1 Kg]
Rated Wind Velocity:	113 mph	[180 Km/h]
Wind Area (CxA/Side):	2.3 sq. ft.	[0.22 sq.m]
Lateral Thrust At Rated Wind Worst Case:	112 lbs	[500 N]

Radiating Elements:	Aluminum
Extrusion:	Aluminum
Radome:	Grey PVC
Tilt-Bracket:	Hot Dip Galvanized Steel
Antenna Bolts:	Stainless Steel

The ALP-E 9011-Din is made in U.S.A.

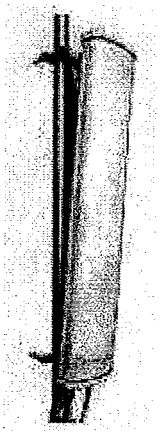
Dual Band ALVC Antenna

70° 1.4 m Vertical polarized FET Antenna

806-896/1850-1990 MHz

Part Number:	Horizontal Beamwidth: 70°	Electrical Downtilt: 0 °
7333.00	Gain: 14.5/17.5 dBi / 12.4/15.4 dBd	Connector Type: 7/16 DIN female

Powerwave dual band solutions provide substantial savings in overall cost because they require less equipment and maintenance and shorter installation times while offering lower site costs. Considering dual band network potential, what you' re really doing is preparing for the future, today. Easy-to-install dual band antennas from Powerwave are deployed in numerous wireless networks worldwide. All have endured extensive field trials in close collaboration with cell planners and other communications providers to ensure Powerwave dual band antennas perform to expectations. Using fewer antennas of discreetly functional design beats using numerous antennas of provocative size and appearance especially with today's aesthetic and environmental concerns.



Key Benefits

- High gain performance
- Light and slim design
- Robust and reliable
- Pre-mounted brackets
- Guaranteed passive intermodulation performance

ANTENNA SYSTEMS

BASE STATION SYSTEMS

COVERAGE SYSTEMS

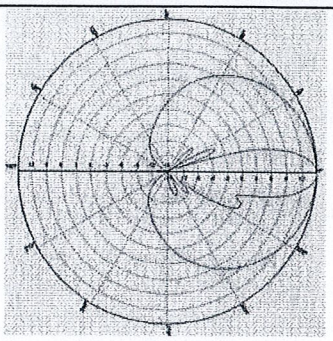
806-896/1850-1990 MHz

Dual Band ALXC Antenna

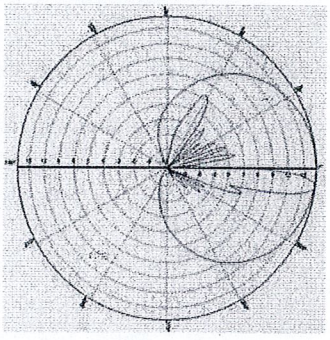
Electrical Specifications

Frequency band (MHz)	806-896 / 1850 - 1990
Gain, ± 0.5 (dBi, dBd)	14.5 / 17.5, 12.4/15.4
Polarization	Vertical linear
Nominal Impedance (Ohm)	50
VSWR	<1.4:1
Horizontal -3 dB beamwidth	70° +/-4
Electrical downtilt	0°
Vertical -3dB Beam width	15° / 7°
Vertical beam squint	<0.5°
Sidelobe suppression, Vertical 1 st upper (dB)	>16/16
First null-fill (dB)	N/A / -17
Front-to-back ratio (dB)	>28
IM3, 2Tx@43dBm (dBc)	<-150
power, per band (W)	600/350
combination (W)	300/175

All specifications are subject to change without notice.
Contact your Powerwave representative for complete performance data.



Typical Horizontal and Vertical 7333.00 Patterns
860 MHz



Typical Horizontal and Vertical 7333.00 Patterns
1930 MHz

Mechanical Specifications

Connector Type	7/16 DIN female
Dimensions, HxWxD	1350x280x125mm (4'5"x11"x5")
Weight with Brackets	9,4kg (20.7lbs)
Wind Load, Frontal, 42 m/s Cd=1 (N)	410
Survival Wind Speed	70m/s (156 mph)
Lightning Protection	DC Grounded
Radome Material	GRP
Radome Color	Light gray RAL 7035 on all visible plastic parts
Packing Size	1520x355x200mm (5'x1'2"x10")
Shipping weight	12,1kg (26.7lbs)

Corporate Headquarters
Powerwave Technologies, Inc.
1801 East St. Andrew Place
Santa Ana, CA 92705 USA
Tel: 714-466-1000
Fax: 714-466-5800
www.powerwave.com

Main European Office
Antennvägen 6
SE-187 80 Täby
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Tel: +46 8 540 822 00
Fax: +46 8 540 823 40

Main Asia Pacific Office
23 F Tai Yau Building
181 Johnston Road
Wanchai, Hong Kong
Tel: +852 2512 6123
Fax: +852 2575 4860

Powerwave technologies

COVERAGE AND CAPACITY | TECHNOLOGY LEADERSHIP | GLOBAL PARTNER | INTEGRATED SOLUTIONS | QUALITY AND RELIABILITY

D031-08154 Rev A

Dual Band ALVC Antenna

80° 1.4 m Vertical polarized FET Antenna

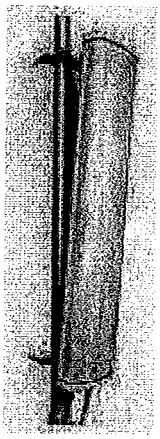
806-896/1850-1990 MHz

Part Number: 7332.00

Horizontal Beamwidth: 80°
Gain: 14/17 dBi / 11.9/14.9 dBd

Electrical Downtilt: 0 °
Connector Type: 7/16 DIN female

Powerwave dual band solutions provide substantial savings in overall cost because they require less equipment and maintenance and shorter installation times while offering lower site costs. Considering dual band network potential, what you're really doing is preparing for the future, today. Easy-to-install dual band antennas from Powerwave are deployed in numerous wireless networks worldwide. All have endured extensive field trials in close collaboration with cell planners and other communications providers to ensure Powerwave dual band antennas perform to expectations. Using fewer antennas of discreetly functional design beats using numerous antennas of provocative size and appearance especially with today's aesthetic and environmental concerns.



Key Benefits

- High gain performance
- Light and slim design
- Robust and reliable
- Pre-mounted brackets
- Guaranteed passive intermodulation performance

ANTENNA SYSTEMS

BASE STATION SYSTEMS

COVERAGE SYSTEMS

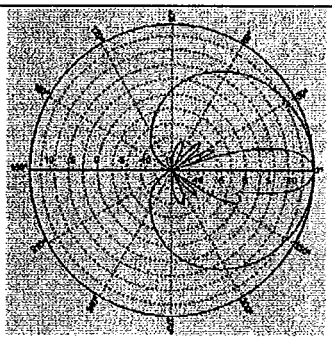
806-896/1850-1990 MHz

Dual Band ALXC Antenna

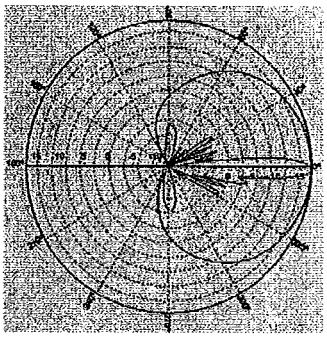
Electrical Specifications

Frequency band (MHz)	806-896 / 1850 - 1990
Gain, ± 0.5 (dBi, dBd)	14.0 / 17.0, 11.9/14.9
Polarization	Vertical linear
Nominal Impedance (Ohm)	50
VSWR	<1.4:1
Horizontal -3 dB beamwidth	80° +/-4
Electrical downtilt	0°
Vertical -3dB Beam width	15° / 7°
Vertical beam squint	<0.5°
Sidelobe suppression, Vertical 1 st upper (dB)	>16/16
First null-fill (dB)	N/A / -17
Front-to-back ratio (dB)	>27
IM3, 2Tx@43dBm (dBc)	<-150
power, per band (W)	600/350
combination (W)	300/175

All specifications are subject to change without notice.
Contact your Powerwave representative for complete performance data.



Typical Horizontal and Vertical 7332.00 Patterns
860 MHz



Typical Horizontal and Vertical 7332.00 Patterns
1930 MHz

Mechanical Specifications

Connector Type	7/16 DIN female
Dimensions, HxWxD	1350x280x125mm (4'5"x11"x5")
Weight with Brackets	9,4kg (20.7lbs)
Wind Load, Frontal, 42 m/s Cd=1 (N)	410
Survival Wind Speed	70m/s (156 mph)
Lightning Protection	DC Grounded
Radome Material	GRP
Radome Color	Light gray RAL 7035 on all visible plastic parts
Packing Size	1520x355x200mm (5'x1'2"x10")
Shipping weight	12,1kg (26.7lbs)

Corporate Headquarters
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Powerwave technologies

COVERAGE AND CAPACITY | TECHNOLOGY LEADERSHIP | GLOBAL PARTNER | INTEGRATED SOLUTIONS | QUALITY AND RELIABILITY

D031-08152 Rev A

URS

March 7, 2006

Ms. Alexandra Carter
Manager Real Estate - Zoning
Verizon Wireless
99 East River Drive
East Hartford, Connecticut 06108

Reference: Proposed Antenna Upgrade
Verizon Wireless Site Name: Riverside, CT
1111 East Putnam Avenue, Greenwich, CT 06878
URS Project Number: VZ1-176 / 36931001

Ms. Carter:

URS Corporation (URS) has been retained by Verizon Wireless to assess the structural capability of this existing site with regard to the sites ability to support a change of antennas.

URS completed a field visit on February 24, 2006 in order to assess the site and gather information on the existing conditions. URS has determined that the existing site has adequate capacity to support the proposed removal of two existing Swedcom ALP-E 9011-DIN antennas per sector and the installation of two Powerwave 7332.00 antennas per sector at the Alpha and Beta sector and the installation of two Powerwave 7333.00 antennas per sector at the Gamma sector. This site has three sectors of antennas.

This determination is based upon requirements of the 2005 Connecticut State Building Code. This determination is also based upon the original site having been designed, fabricated and installed in compliance with construction documents and State Building Codes.

Should there be questions, please do not hesitate to call.

Sincerely,
URS Corporation

Richard Sambor, P.E.
Manager Facilities Design

RAS/jek

Cc: IA, DR, AA – URS
CF/File

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, CT 06067
Tel: 860.529.8882
Fax: 860.529.3991

DECIBEL®
Base Station Antennas

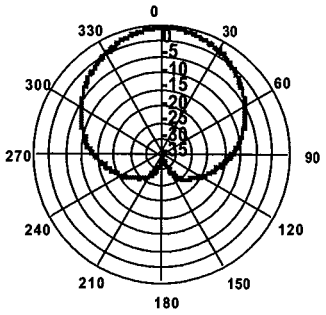
DB842H65E-XY

10.5 dBd, Directed Dipole Antenna
806-896, 870-960 MHz

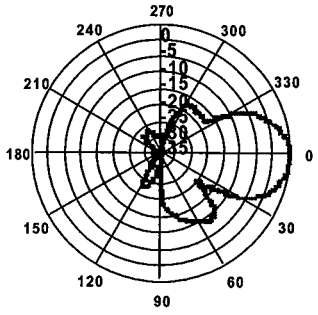
806-896 MHz
870-960 MHz

65°

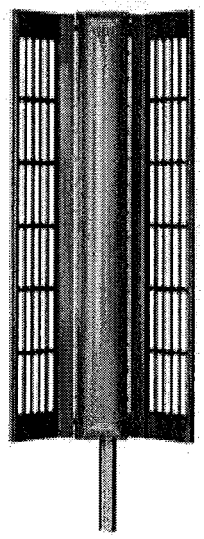
- Excellent azimuth roll-off, 15-20% reduction in cell to cell overlap
- Superior front to back ratio
- Low profile, low wind load for easy zoning
- Outstanding field record, with thousands of units deployed, world wide



Horizontal 880 MHz (Tilt=0)



Vertical 880 MHz (Tilt=0)



ELECTRICAL		
Frequency (MHz):	806-896	870-960
Polarization:	Vertical	Vertical
Gain (dBd/dBi):	10.5/12.6	10.7/12.8
Azimuth BW:	65°	65°
Elevation BW:	30°	30°
Beam Tilt:	0°	0°
Front-to-Back Ratio* (dB):	40	40
VSWR:	<1.4:1	<1.4:1
Impedance:	50 Ohms	50 Ohms
Max Input Power:	500 Watts	500 Watts
Lightning Protection:	DC Ground	DC Ground

MECHANICAL	
Weight:	10 lbs (4.5 kg)
Dimensions (LxWxD):	24 X 20.5 X 9 in (610 X 521 X 229 mm)
Max. Wind Area:	1.61 ft² (0.15 m²)
Max. Wind Load (@ 100mph):	91 lbf (405 N)
Max. Wind Speed:	100 mph (161 km/h)
Radiator Material:	Brass
Reflector Material:	Aluminum
Radome Material:	ABS, UV Resistant
Mounting Hardware Material:	Galvanized Steel
Connector Type:	7-16 DIN - Female (Back)
Color:	Light Gray
Standard Mounting Hardware:	DB380 Pipe Mount Kit, included
Downtilt Mounting Hardware:	DB5083, optional
Opt. Mounting Hardware:	DB5084-AZ

Andrew Corporation
8635 Stemmons Freeway
Dallas, Texas U.S.A 75247-3701
Tel: 214.631.0310

Fax: 214.631.4706
Toll Free Tel: 1.800.676.5342
Fax: 1.800.229.4706
www.andrew.com

dbtech@andrew.com

Date: 4/23/2004
* - Indicates Typical Values

Vertically Polarized, Dual-Band Panel 63° / 63°

ADA-63206340CF ___

When ordering, replace "___" with connector type.

Mechanical specifications

	Length	601 mm	23.7 in
	Width	421 mm	16.6 in
	Depth	105 mm	4.1 in
4)	Weight	4.5 kg	10 lbs
	Wind Area		
	Front	0.253 m^2	2.72 ft^2
	Side	0.063 m^2	0.68 ft^2
	Rated Wind Velocity (Safety factor 2.0)		
		>616 km/hr	>383 mph
	Wind load @ 100 mph (161 km/hr)		
	Front	358 N	80.5 lbs
	Side	92 N	20.6 lbs

Antenna consisting of aluminum alloy with brass feedlines covered by a UV safe fiberglass radome.

Mounting & Downtilting:
Mounting brackets attach to a pipe diameter of Ø50-160 mm (2.0-6.3 in).

Mounting bracket kit #36210002
Downtilt bracket kit #36211102

Electrical specifications

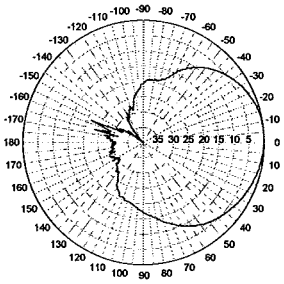
Cellular		Frequency Range	806-960 MHz
	1)	Half Power Angle	
		H-Plane	63°
		E-Plane	30°
	1)	Gain	10 dBd / 12 dBi
	1)	Electrical Downtilt	0°
	1)	Isolation between ports	< -30 dB
PCS		Frequency Range	1850-1990 MHz
	1)	Half Power Angle	
		H-Plane	63°
		E-Plane	16°
	1)	Gain	12.5 dBd / 14.5 dBi
	1)	Electrical Downtilt	0°
	1)	Isolation between ports	< -30 dB
		Impedance	50Ω
	3)	Connector	NE, E-DIN
	1)	VSWR	≤1.4:1
		Polarization	Vertical
	2)	Power Rating - Cellular	500 W
		Power Rating - PCS	250 W
		Lightning Protection	Direct Ground

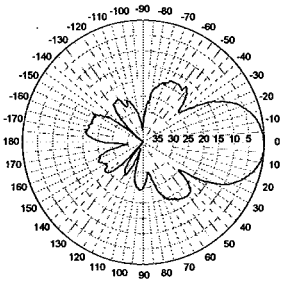
Patented Dipole Design: U.S. Patent No. 6,229,496 B1

[1] Typical Values
[2] Power Rating limited by connector only.
[3] NE indicates an elongated N Connector.
E-DIN indicates an elongated DIN Connector.
[4] The antenna weight listed above does not include the bracket weight.

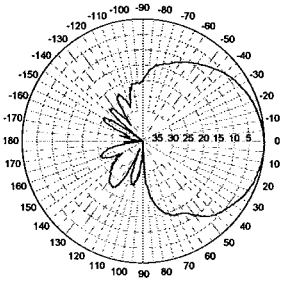
Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

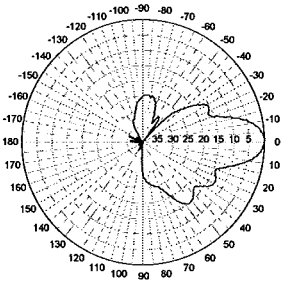
Radiation-pattern[1)]
Cellular - 806-960 MHz





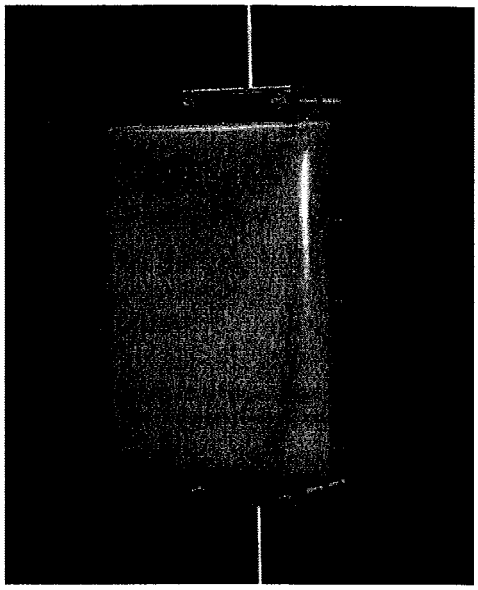
Radiation-pattern[1)]
PCS - 1850-1990 MHz





CF Denotes a Center-Fed Connector.

806-960 MHz & 1850-1990 MHz



Amphenol Antel's Exclusive 3T (True Transmission Line Technology) Antenna Design:

- Watercut brass feedline assembly for consistent performance.
- Unique feedline design eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad bandwidth and superior performance.
- Air as insulation for virtually no internal signal loss.

Every Amphenol Antel antenna is under a five-year limited warranty for repair or replacement.

Radiation patterns for all antennas are measured with the antenna mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the Front-to-Back Ratio.

Antenna available with center-fed connector only.

1300 Capital Drive Rockford, IL 61109 Toll-Free (888) 417-9562 Tel. (815) 399-0001
Fax. (815) 399-0156 Email: antel@antelinc.com www.antelinc.com

Amphenol Antel, Inc.
The Antenna Technology Company

Revision Date: 11/11/04

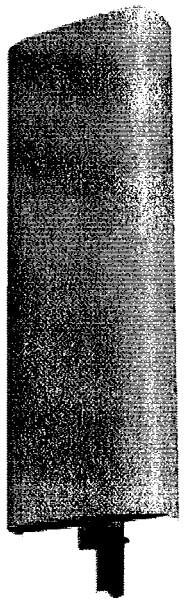
KATHREIN
SCALA DIVISION

AP13-850/047

47° Panel Antenna

Kathrein-Scala 47° panels are designed for conventional space diversity systems.

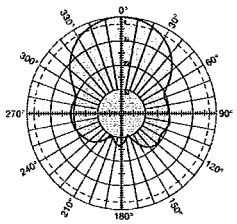
- High strength UV-resistant radome.
- Alodined rigid aluminum reflector/back plane.
- DC Grounded metallic parts for impulse suppression.
- Fixed downtilt options.



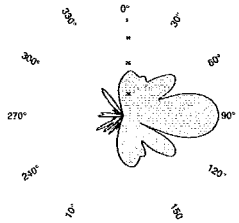
Specifications:

Frequency range	806–894 MHz
Gain	13 dBd
Impedance	50 ohms
VSWR	< 1.3:1
Intermodulation (2x20w)	IM3: -150dBc
Polarization	Vertical
Front-to-back ratio	>24 dB
Maximum input power	500 watts (at 50°C)
H-plane beamwidth	47 degrees (half-power)
E-plane beamwidth	20 degrees (half-power)
Electrical downtilt	0, 6, or 12 degrees
Connector	N or 7/16 DIN female
Weight	13 lb (5.9 kg)
Dimensions	38.5 x 14.3 x 4.5 inches (978 x 364 x 114 mm)
Equivalent flat plate area	4.59 ft² (0.426 m²)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	51.5 x 14.5 x 5 inches (1308 x 368 x 127 mm)
Shipping weight	18 lb (8.2 kg)
Mounting	Fixed and tilt-mount options are available for 2 to 4.6 inch (50 to 115 mm) OD masts. Panel can be inverted.

See reverse for order information.



H-plane
Horizontal pattern
V-polarization



E-plane
Vertical pattern
V-polarization

* Mechanical design is based on environmental conditions as stipulated in EIA-222-F (June 1996) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.

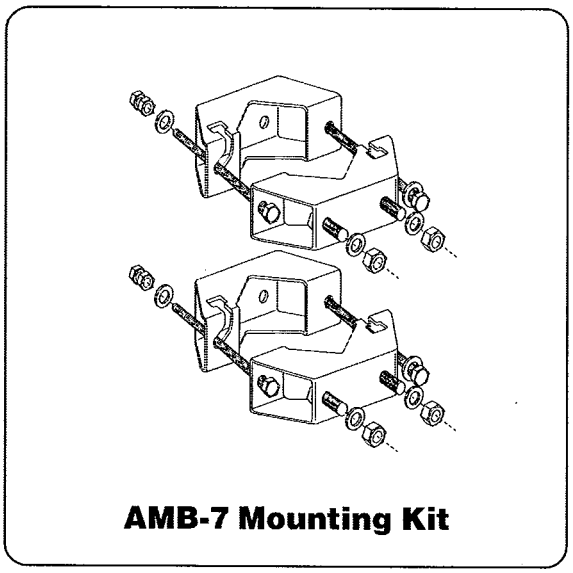
10008-H

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com

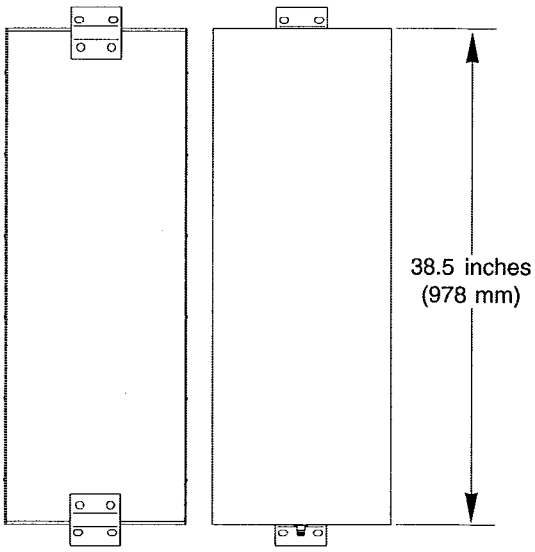
KATHREIN
SCALA DIVISION

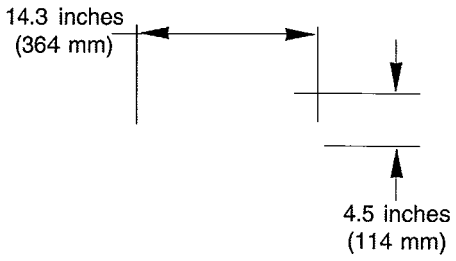
AP13-850/047

47° Panel Antenna



AMB-7 Mounting Kit





Mounting Options:

Model	Description
AMB-7 (shown)	Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast.
TB-5B	Tilt Mount Kit 0–20 degrees downtilt angle.

Order Information:

Model	Description
AP13-850/047N	Antenna with N connector 0° electrical downtilt
AP13-850/047N/DT6	Antenna with N connector 6° electrical downtilt
AP13-850/047N/DT12	Antenna with N connector 12° electrical downtilt
AP13-850/047D	Antenna with 7/16 DIN connector 0° electrical downtilt
AP13-850/047D/DT6	Antenna with 7/16 DIN connector 6° electrical downtilt
AP13-850/047D/DT12	Antenna with 7/16 DIN connector 12° electrical downtilt

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com

URS

March 7, 2006

Ms. Alexandra Carter
Manager Real Estate - Zoning
Verizon Wireless
99 East River Drive
East Hartford, Connecticut 06108

Reference: Proposed Antenna Upgrade
Verizon Wireless Site Name: New Haven E, CT
153 Forbes Avenue, New Haven, CT 06512
URS Project Number: VZ1-174 / 3693099

Ms. Carter:

URS Corporation (URS) has been retained by Verizon Wireless to assess the structural capability of this existing site with regard to the sites ability to support a change of antennas.

URS completed a field visit on March 7, 2006 in order to assess the site and gather information on the existing conditions. URS has determined that the existing site has adequate capacity to support the proposed removal of two existing Decibel DB842H65 antennas per sector and the installation of two Antel ADA-63206340CF antennas per sector at the Alpha and Beta sector and the installation of two Kathrein AP13-850/047 antennas per sector at the Gamma sector. This site has three sectors of antennas.

This determination is based upon requirements of the 2005 Connecticut State Building Code. This determination is also based upon the original site having been designed, fabricated and installed in compliance with construction documents and State Building Codes.

Should there be questions, please do not hesitate to call.

Sincerely,
URS Corporation

Richard Sambor, P.E.
Manager Facilities Design

RAS/jek

Cc: IA, DR, AA – URS
CF/File

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, CT 06067
Tel: 860.529.8882
Fax: 860.529.3991

DECIBEL
Base Station Antennas

DB844G65ZAXY

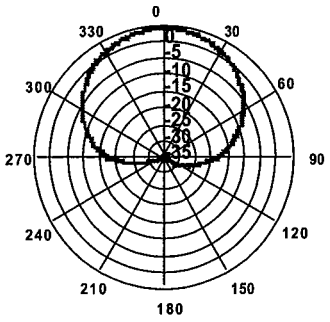
13.5 dBd, Directed Dipole, No Screen Antenna
806-896, 870-960 MHz

806-896 MHz
870-960 MHz

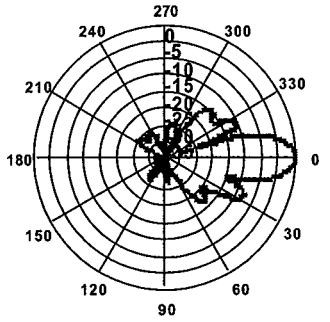
GEN3VPOL™
ZoneMaster™

65°

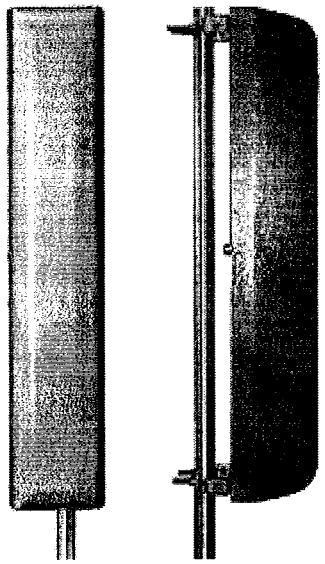
- Excellent azimuth roll-off, reducing sector to sector interference and reducing soft hand-offs
- Air dielectric feed system, no screws, rivets, welds or solder in RF element feed path
- Strong upper side lobe suppression
- Low profile appearance and low wind loading profile for easier zoning approvals



Horizontal 880 MHz (Tilt=0)



Vertical 880 MHz (Tilt=0)



ELECTRICAL		
Frequency (MHz):	806-896	870-960
Polarization:	Vertical	Vertical
Gain (dBd/dBi):	13.5/15.6	13.8/15.9
Azimuth BW:	65°	65°
Elevation BW:	15°	15°
Beam Tilt:	0°	0°
USLS* (dB):	>15	>15
Null Fill* (dB):	20-25	20-25
Front-to-Back Ratio* (dB):	40	40
VSWR:	<1.33:1	<1.33:1
Impedance:	50 Ohms	50 Ohms
Max Input Power:	500 Watts	500 Watts
Lightning Protection:	DC Ground	DC Ground
Opt Electrical Tilt:	6°	6°

MECHANICAL	
Weight:	12 lbs (5.4 kg)
Dimensions (LxWxD):	48 X 10 X 8.5 in (1219 X 254 X 216 mm)
Max. Wind Area:	0.97 ft² (0.09 m²)
Max. Wind Load (@ 100mph):	53 lbf (236 N)
Max. Wind Speed:	125 mph (201 km/h)
Radiator Material:	Aluminum
Reflector Material:	Aluminum
Radome Material:	ABS, UV Resistant
Mounting Hardware Material:	Galvanized Steel
Connector Type:	7-16 DIN-Female (Back)
Color:	Light Gray
Standard Mounting Hardware:	DB380 Pipe Mount Kit, included
Downtilt Mounting Hardware:	DB5083, optional
Opt. Mounting Hardware:	DB5084-AZ Azimuth Wall Mount

ANDREW®

Andrew Corporation
8635 Stemmons Freeway
Dallas, Texas U.S.A 75247-3701
Tel: 214.631.0310

Fax: 214.631.4706
Toll Free Tel: 1.800.676.5342
Fax: 1.800.229.4706
www.andrew.com

dbtech@andrew.com

Warranty: Five years
Date: 4/23/2004
* - Indicates Typical Values

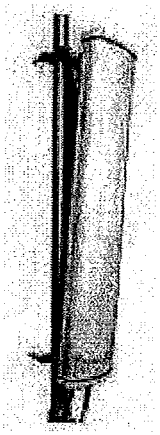
Dual Band ALVC Antenna

70° 1.4 m Vertical polarized FET Antenna

806-896/1850-1990 MHz

Part Number:	Horizontal Beamwidth: 70°	Electrical Downtilt: 0 °
7333.00	Gain: 14.5/17.5 dBi / 12.4/15.4 dBd	Connector Type: 7/16 DIN female

Powerwave dual band solutions provide substantial savings in overall cost because they require less equipment and maintenance and shorter installation times while offering lower site costs. Considering dual band network potential, what you' re really doing is preparing for the future, today. Easy-to-install dual band antennas from Powerwave are deployed in numerous wireless networks worldwide. All have endured extensive field trials in close collaboration with cell planners and other communications providers to ensure Powerwave dual band antennas perform to expectations. Using fewer antennas of discreetly functional design beats using numerous antennas of provocative size and appearance especially with today's aesthetic and environmental concerns.



Key Benefits

- High gain performance
- Light and slim design
- Robust and reliable
- Pre-mounted brackets
- Guaranteed passive intermodulation performance

ANTENNA SYSTEMS

BASE STATION SYSTEMS

COVERAGE SYSTEMS

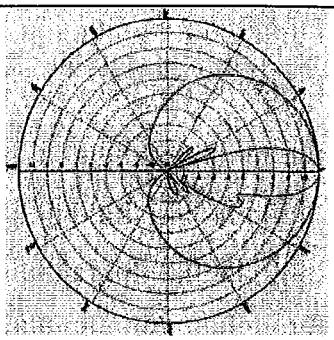
806-896/1850-1990 MHz

Dual Band ALXC Antenna

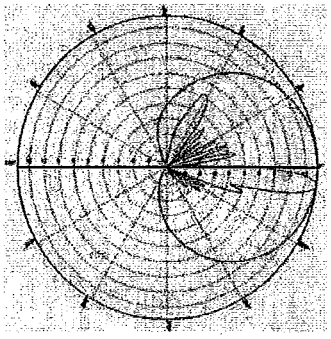
Electrical Specifications

Frequency band (MHz)	806-896 / 1850 - 1990
Gain, ± 0.5 (dBi, dBd)	14.5 / 17.5, 12.4/15.4
Polarization	Vertical linear
Nominal Impedance (Ohm)	50
VSWR	<1.4:1
Horizontal -3 dB beamwidth	70° +/-4
Electrical downtilt	0°
Vertical -3dB Beam width	15° / 7°
Vertical beam squint	<0.5°
Sidelobe suppression, Vertical 1 st upper (dB)	>16/16
First null-fill (dB)	N/A / -17
Front-to-back ratio (dB)	>28
IM3, 2Tx@43dBm (dBc)	<-150
power, per band (W)	600/350
combination (W)	300/175

All specifications are subject to change without notice.
Contact your Powerwave representative for complete performance data.



Typical Horizontal and Vertical 7333.00 Patterns
860 MHz



Typical Horizontal and Vertical 7333.00 Patterns
1930 MHz

Mechanical Specifications

Connector Type	7/16 DIN female
Dimensions, HxWxD	1350x280x125mm (4'5"x11"x5")
Weight with Brackets	9,4kg (20.7lbs)
Wind Load, Frontal, 42 m/s Cd=1 (N)	410
Survival Wind Speed	70m/s (156 mph)
Lightning Protection	DC Grounded
Radome Material	GRP
Radome Color	Light gray RAL 7035 on all visible plastic parts
Packing Size	1520x355x200mm (5'x1'2"x10")
Shipping weight	12,1kg (26.7lbs)

Corporate Headquarters
Powerwave Technologies, Inc.
1801 East St. Andrew Place
Santa Ana, CA 92705 USA
Tel: 714-466-1000
Fax: 714-466-5800
www.powerwave.com

Main European Office
Antennvägen 6
SE-187 80 Täby
Sweden
Tel: +46 8 540 822 00
Fax: +46 8 540 823 40

Main Asia Pacific Office
23 F Tai Yau Building
181 Johnston Road
Wanchai, Hong Kong
Tel: +852 2512 6123
Fax: +852 2575 4860

Powerwave technologies

COVERAGE AND CAPACITY | TECHNOLOGY LEADERSHIP | GLOBAL PARTNER | INTEGRATED SOLUTIONS | QUALITY AND RELIABILITY

D031-08154 Rev A

URS

March 7, 2006

Ms. Alexandra Carter
Manager Real Estate - Zoning
Verizon Wireless
99 East River Drive
East Hartford, Connecticut 06108

Reference: Proposed Antenna Upgrade
Verizon Wireless Site Name: E. Hartford W, CT
886 Main Street, East Hartford, CT 06108
URS Project Number: VZ1-172 / 36930997

Ms. Carter:

URS Corporation (URS) has been retained by Verizon Wireless to assess the structural capability of this existing site with regard to the sites ability to support a change of antennas.

URS completed a field visit on March 6, 2006 in order to assess the site and gather information on the existing conditions. URS has determined that the existing site has adequate capacity to support the proposed removal of two existing Decibel DB844G65ZAXY antennas per sector at the Beta and Gamma sectors and the installation of two Powerwave 7333.00 antennas per sector at the Beta and Gamma sectors. This site has three sectors of antennas.

This determination is based upon requirements of the 2005 Connecticut State Building Code. This determination is also based upon the original site having been designed, fabricated and installed in compliance with construction documents and State Building Codes.

Should there be questions, please do not hesitate to call.

Sincerely,
URS Corporation

Richard Sambor, P.E.
Manager Facilities Design

RAS/jek

Cc: IA, DR, AA – URS
CF/File

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, CT 06067
Tel: 860.529.8882
Fax: 860.529.3991

DECIBEL PRODUCTS
An Allen Telecom Company

844H90EXYBAM

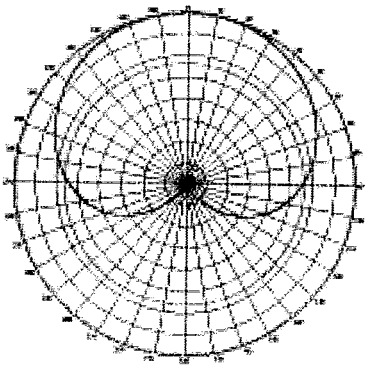
12 dBd
Log Periodic Antenna

824-896 MHz

dB Director®

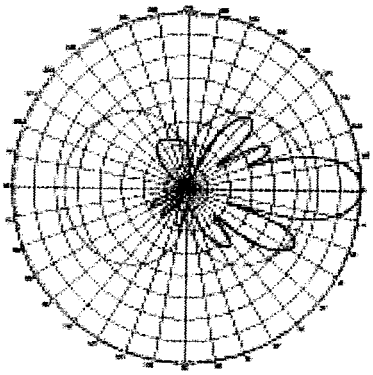
90°

- **Superior Azimuth pattern roll off, reducing sector to sector interference, improving call capacity.**
- **Extremely rugged, reliable design yet lightweight with low wind load.**

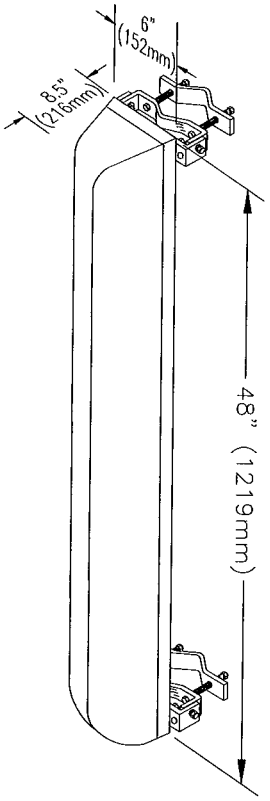


Azimuth (Horizontal)

Elevation (Vertical)



Scale: 10° radials, 5 dB per division



Electrical

Frequency:	824-896 MHz
Polarization:	Vertical
Gain:	12 dBd (14.1 dBi)
Azimuth BW:	90°
Elevation BW:	15.5°
USLS:	> 18 dB
Front-to-Back Ratio:	40 dB
VSWR:	1.22:1
PIM:	-150 dBc (2 tone, 20 watt)
Impedance:	50 Ohms
Max. Input Power:	500 Watts
Lightning Protection:	All metal parts are grounded

Mechanical

Weight:	10 lbs (4.5 kg)
Dimensions:	48" x 6" x 8.5" (1219 x 152 x 216 mm)
Max. Wind Area:	2.8 ft² (0.26 m²)
Max. Wind Load:	80 lbf (356N) 35.9 kp (at 100 mph)
Max. Wind Speed:	125 mph (201 km/h)
Radiators:	Brass
Reflector:	Pass. Aluminum
Radome:	ABS, UV Resistant
Mounting Hardware:	Galvanized Steel
Connector:	7/16 DIN (Back)
Color:	Gray

Mounting Options

Standard:	DB380 pipe mount kit included.
Downtilt:	DB5083 downtilt brackets, optional.

8635 Stemmons Freeway • Dallas, Texas U.S.A. 75247-3701
Dallas/Ft.Worth Area Tel: 214.631.0310 • Fax: 214.631.4706
Toll Free Tel: 1.800.676.5342 • Fax: 1.800.229.4706
www.decibelproducts.com
dbtech@decibelproducts.com

099089-052 05/02-B

ISO9001 Compliant

Vertically Polarized, Panel 78° / 13 dBd

RWA-80013 ___

When ordering, replace "___" with connector type.

Mechanical specifications

Length	1225 mm	48.2 in
Width	285 mm	11.2 in
Depth	160 mm	6.3 in
Weight	6.5 kg	14.3 lbs
Wind Area	0.349 m²	3.75 ft²
Wind load at 50 m/s	560 N	126 lbs

Antenna consisting of aluminum alloy with brass feedlines covered by a UV safe fiberglass radome.

Mounting & Downtilting:

Mounting brackets attach to a pipe diameter of Ø50-160 mm (2.0-6.3 in)

Mounting bracket kit #36210002

Downtilt bracket kit #36114003

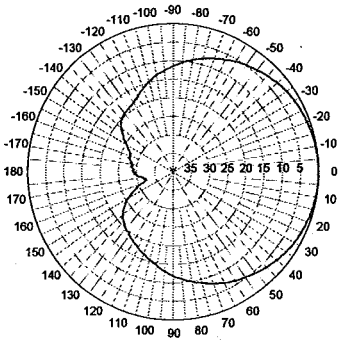
Electrical specifications

Frequency Range	806-960 MHz
Impedance	50Ω
Connector	NE-E-DIN
VSWR	≤1.4:1
Polarization	Vertical
Gain	13 dBd
Power Rating	500 W
Half Power Angle	
H-Plane	78°
E-Plane	14°
Electrical Downtilt	1.25°
Null Fill	45%
Lightning Protection	Direct Ground

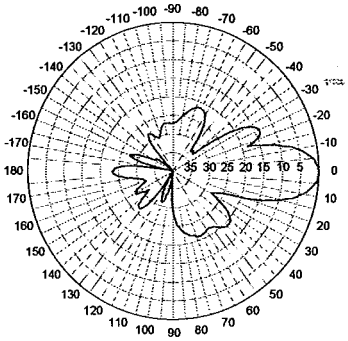
1) Typical Values
2) Power Rating limited by connector only
3) NE indicates an elongated N Connector.
4) E-DIN indicates an elongated DIN Connector.
5) The antenna weight listed above does not include the bracket weight.

Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

Radiation-pattern[1)]



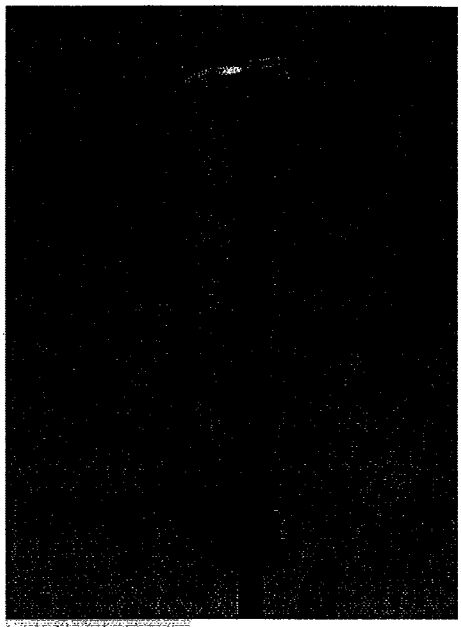
Horizontal



Vertical

Radiation patterns for all antennas are measured with the antenna mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the Front-to-Back Ratio.



Amphenol Antel's Exclusive 3T (True Transmission Line Technology) Antenna Design:

- A 1¼" four-channel extrusion running the entire length of the antenna for unmatched strength and rigidity.
- Durable brass feedline design that eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad band width and superior performance.
- Air as insulation for virtually no internal signal loss.

Every Amphenol Antel antenna is under a five-year limited warranty for repair or replacement.

Antenna available with bottom-fed connector. Contact your Amphenol Antel representative or our company headquarters for the availability of a center-fed connector.

806-960 MHz

Amphenol Antel, Inc.
The Antenna Technology Company

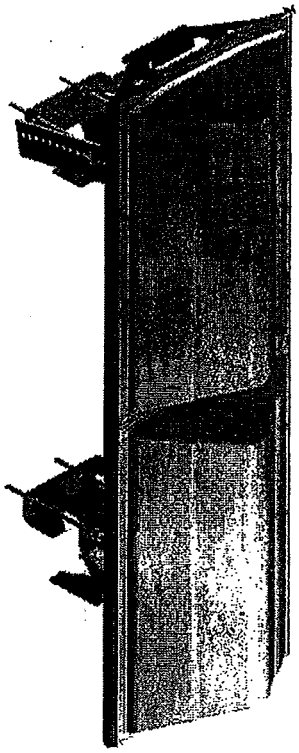
1300 Capital Drive Rockford, IL 61109 Toll-Free (888) 417-9562 Tel. (815) 399-0001
Fax (815) 399-0156 Email: antel@antelinc.com www.antelinc.com

Revision Date: 6/3/04

CSS® Antenna

Directing our energies for you.

Dual Band Antenna
DUO1417-8686



86 & 86 Azimuth Beams

15 & 7 Elevation Beams

14.0 & 16.0 dBi Gain

- PCS & Cellular in One Package
- Independent Control of Electrical Beam Downtilt
- High Power Handling Capability
- Anti-Corrosion Design for Superb IM Performance
- Available With Optional Internal Dual Band Combiner

CSS Antenna, Inc. 2206-D Lakeside Blvd, Edgewood, MD 21040, Tel: 410-612-0080 Fax: 410-612-0336 www.cssantenna.com

Directing our energies for you.

Dual Band Antenna
DUO1417- 8686

Electrical Specifications

	Cellular	PCS
Frequency Range	806-900 MHz	1850-1990 MHz
Gain	14.0 dBi	16..0 dBi
Electrical Downtilt Options	0, 2, 4 or 6 Degrees	0 or 4 Degrees
VSWR	1.35:1 Maximum	1.35:1 Maximum
VSWR (with -i option)	1.40:1 Maximum	1.40:1 Maximum
Front-to-Back at Horizon	> 25 dB	> 30 dB
Upper Side Lobe Suppression	< -17 dB	< -18 dB
Elevation Beam (3-dB Points)	15 Degrees	7 Degrees
Azimuth Beam (3-dB Points)	86 Degrees	86 Degrees
Polarization	Vertical	Vertical
Impedance	50 Ohms	50 Ohms
Power Input Rating	500 CW	200 CW
Intermodulation Specification	<-110dBm at 2x10W	<-110dBm at 2x10W

Mechanical Specifications

Input Connectors (female)	Two Back Mounted 7/16 DIN (Silver Finish)
Antenna Dimensions	48.4 x 14 x 9 Inches (10.7" deep with option 'i')
Antenna Weight	20.3 lbs
Antenna Weight (w/opt. 'i')	32.0 lbs
Bracket Weight	10.5 lbs
Lightning Protection	Direct Ground
RF Distribution	Cellular: Silver Plated Brass PCS: Printed Microstrip Substrate
Radome	Ultra High-Strength Luran
Weatherability	UV Stabilized, ASTM D1925
Radome Water Absorption	ASTM D570, 0.45%
Environmental	MIL-STD-810E
Wind Survival	150 mph
Front Wind Load at 100 mph	124 lbs
Front Flat Plate Equivalent	2.54 sq-ft. (c=2)
Mounting Brackets	Fits 2.5 to 3 Inch Schedule 40 Pipe
Mechanical Downtilt Range	0-12 Degrees in 1 Degree Increments
Clamps/Bolts	Hot Dip Galvanized Steel/Stainless Steel

Ordering Information

Model	Options
DUO1417- 8686-xy	x=Electrical Downtilt at 800 MHz in Degrees (0, 2, 4 or 6) y=Electrical Downtilt at 1900 MHz in Degrees (0 or 4)
DUO1417-8686-xyi	i=Dual Band Combiner included as an internal device

CSS Antenna, Inc.
Tel:410-612-0080 Fax: 410-612-0336
www.cssantenna.com

URS

March 7, 2006

Ms. Alexandra Carter
Manager Real Estate - Zoning
Verizon Wireless
99 East River Drive
East Hartford, Connecticut 06108

Reference: Proposed Antenna Upgrade
Verizon Wireless Site Name: Wethersfield, CT
100 Great Meadow Road, Wethersfield, CT 06109
URS Project Number: VZ1-173 / 36930998

Ms. Carter:

URS Corporation (URS) has been retained by Verizon Wireless to assess the structural capability of this existing site with regard to the sites ability to support a change of antennas.

URS completed a field visit on March 6, 2006 in order to assess the site and gather information on the existing conditions. URS has determined that the existing site has adequate capacity to support the proposed removal of two existing Decibel DB844H90E-XY antennas per sector and the installation of two Antel RWA-80013 antennas per sector at the Alpha and Beta sectors and the installation of two CSS DUO1417-8686 antennas per sector at the Gamma sector. This site has three sectors of antennas.

This determination is based upon requirements of the 2005 Connecticut State Building Code. This determination is also based upon the original site having been designed, fabricated and installed in compliance with construction documents and State Building Codes.

Should there be questions, please do not hesitate to call.

Sincerely,
URS Corporation

Richard Sambor, P.E.
Manager Facilities Design

RAS/jek

Cc: IA, DR, AA – URS
CF/File

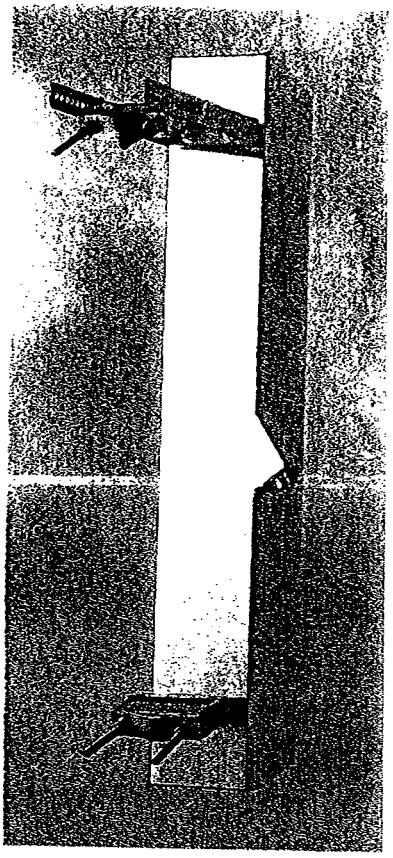
URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, CT 06067
Tel: 860.529.8882
Fax: 860.529.3991

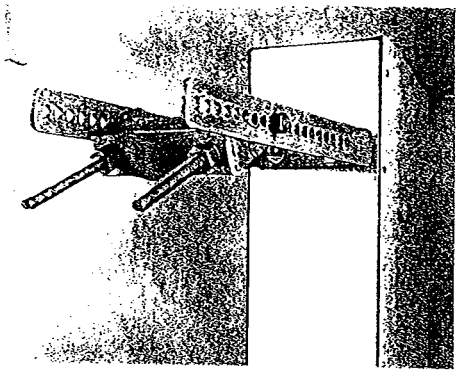
ALP-E 9011-Din

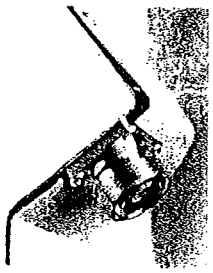
Enhanced Log-Periodic Antenna

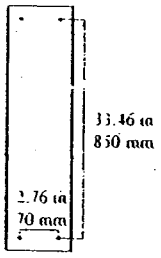
Features:

- ❑ Small Size
- ❑ Aesthetically Pleasing
- ❑ Suitable For TDMA/CDMA
- ❑ High Return Loss
- ❑ Low Intermodulation
- ❑ High FTB
- ❑ Broadbanded
- ❑ Side-lobe Suppression
- ❑ Sturdy Design
- ❑ Down-Tilt Brackets Incl.









The distance between the center of the bolts (on the back of the antenna) are shown in the drawing above.

Bolt diameter is: 3/8-16 [comes with lock nut].

Frequency Range:	800-900 MHz
Impedance:	50 ohm
Connector Type:	7/16 Din
Return Loss:	20 dB
Polarization:	Vertical
Gain:	> 11 dBd
Front To Back Ratio:	> 30 dB
Side-Lobe Suppression:	18 dB
Intermodulation (2x25W):	IM3 > 146 dB
	IM5 > 153 dB
	IM7/9 > 163 dB
Power Rating:	500 W
H-Plane (-3 dB point):	85 - 92°
V-Plane (-3 dB point):	16 - 18°
Lightning Protection:	DC Grounded

Overall Height:	43 in	[1092 mm]
Width:	6.5 in	[165 mm]
Depth:	8 in	[203 mm]
Weight Including Tilt-Brackets:	20 lbs	[9.1 Kg]
Rated Wind Velocity:	113 mph	[180 Km/h]
Wind Area (CxA/Side):	2.3 sq. ft.	[0.22 sq.m]
Lateral Thrust At Rated Wind Worst Case:	112 lbs	[500 N]

Radiating Elements:	Aluminum
Extrusion:	Aluminum
Radome:	Grey PVC
Tilt-Bracket:	Hot Dip Galvanized Steel
Antenna Bolts:	Stainless Steel

The ALP-E 9011-Din is made in U.S.A.

Panel 90° / 11.5 dBd

WPA-80090/4CF ___

When ordering, replace "___" with connector type.

806-960 MHz

Mechanical specifications

Length	1205 mm	47.4 in
Width	205 mm	8.1 in
Depth	145 mm	5.7 in
Weight	5.4 kg	12.0 lbs
Wind Area		
Front	0.25 m²	2.66 ft²
Side	0.17 m²	1.88 ft²
Rated Wind Velocity (Safety Factor 2.0)		
	679 km/hr	422 mph
Wind load @ 100 mph (161 km/hr)		
Front	362 N	81.4 lbs
Side	264 N	59.4 lbs

Mounting
Through two pair of clamps to pipe diameter Ø50-127 mm (2.0-5.0 in), or by U-clamps to a 2" pipe.

Antenna consisting of aluminum alloy with brass feedlines, covered by a UV safe fiberglass radome.

Mounting Bracket: #36210002
Downtilt Bracket: #36114003

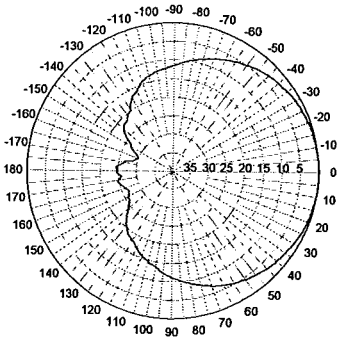
Electrical specifications

Frequency Range	806-960 MHz
Impedance	50Ω
Connector	N, NE, DIN, E-DIN
VSWR	1.4:1
Polarization	Vertical
Gain	11.5 dBd
Power Rating	500 W
Half Power Angle	
H-Plane	90°
E-Plane	15°
Lobe Tilt	0°
Null Fill	10%
Lightning Protection	Direct Ground

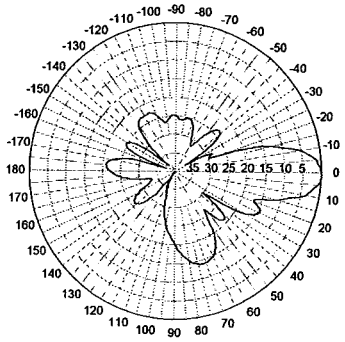
1) Typical Values
2) Power Rating limited by connector only
NE indicates an elongated N Connector
E-DIN indicates an elongated DIN Connector

Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

Radiation-pattern[1)]



Horizontal



Vertical

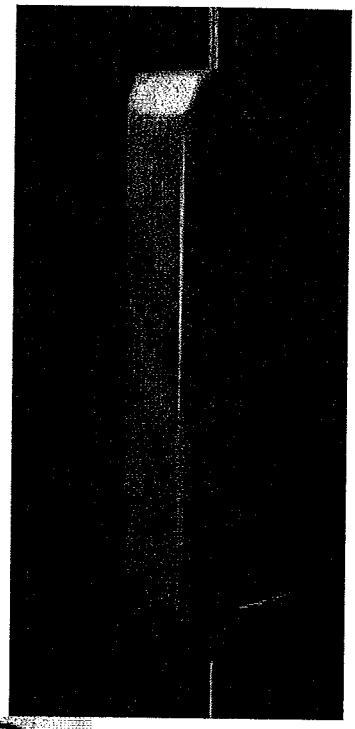
Featuring upper side lobe suppression.

Radiation patterns for all Antel antennas are measured with the antenna mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the Front-to-Back Ratio.

CF Denotes a Center-Fed Connector.

806-960 MHz



Antel's Exclusive 3T (True Transmission Line Technology) Antenna Design:

- Single-piece, watercut brass feedline assembly for consistent performance.
- Unique single-piece feedline design eliminates the need for solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad bandwidth and superior performance.
- Air as insulation for virtually no internal signal loss.

Every Antel antenna is under a five-year limited warranty for repair or replacement.

Antenna available with center-fed connector only.

1300 Capital Drive Rockford, IL 61109 Toll-Free (888) 417-9562 Tel. (815) 399-0001
Fax (815) 399-0156 Email: antel@antelinc.com www.antelinc.com

Antel INTERNATIONAL, INC.

Revision Date: 05/27/03

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

March 2, 2006

Verizon Wireless
99 East River Drive, 9th Floor
East Hartford, CT 06108

Attn: Esther McNany
Re: 188' Self-Supporting Tower, East Windsor, CT

Dear Esther,

I am writing with regard to Verizon Wireless's proposed antenna changes to be installed on the 188' ROHN self-supporting tower located at 232 South Main Street in East Windsor, Connecticut.

All-Points Technology Corporation, P.C. performed a structural analysis for Verizon Wireless in March of 2005. Our analysis, dated March 2, 2005, found the tower and foundations were capable of supporting the proposed antennas. No changes have reportedly occurred to the tower's loading since that report was issued. Verizon now proposes to replace their nine existing Swedcom ALP-9011 panel antennas with nine Antel WPA-80090/4CF panel antennas. The proposed Antel antennas are slightly smaller than the existing antennas and will impart less load on the tower. Existing antenna mounts and waveguide cables will be used.

My evaluation, performed in accordance with the Connecticut State Building Code and TIA-222 Revisions F & G, indicates that the tower is capable of supporting the proposed antenna changes. Anticipated stress levels in the tower and foundation will remain less than design capacity.

We appreciate this opportunity to provide our services to you. Please call if you have any questions.

Sincerely,
All-Points Technology Corporation, P.C.

Robert E. Adair, P.E.
Principal

CT141511 East Windsor 3-2-06 ltr.doc

☐ 3 SADDLEBROOK DRIVE • KILLINGWORTH, CONNECTICUT 06419 • PHONE: 860-663-1697 • FAX: 860-663-0935
☒ 150 OLD WESTSIDE ROAD • NORTH CONWAY, NEW HAMPSHIRE 03860 • PHONE/FAX: 603-356-5214