

Product Specifications



DB846F65ZAXY

Directed Dipole™ Antenna, 806-960 MHz, 65° horizontal beamwidth, fixed electrical tilt



- Excellent azimuth roll-off, reducing soft hand-offs and improving capacity
- Deep null filling below the horizon for improved signal intensity
- · Rugged, reliable design, light weight for low tower loading
- · Air dielectric feed system

CHARACTERISTICS

General Specifications

Antenna Type

Directed Dipole™

Brand

Directed Dipole™

Operating Frequency Band 806 - 960 MHz

Electrical Specifications

Frequency Band, MHz	806-896	870-960
Beamwidth, Horizontal, degrees	65	60
Gain, dBd	14.5	14.8
Gain, dBi	16.6	16.9
Beamwidth, Vertical, degrees	11.0	10.5
Beam Tilt, degrees	0	0
Upper Sidelobe Suppression (USLS), typical, dB	15	15
Front-to-Back Ratio at 180°, dB	40	40
VSWR Return Loss, db	1.33:1 17.0	1.33:1 17.0
Intermodulation Products, 3rd Order, 2 x 20 W, dBc	-150	-150
Input Power, maximum, watts	500	500
Polarization	Vertical	Vertical
Impedance, ohms	50	50
Lightning Protection	dc Ground	dc Ground

Product Specifications

ANDREW® A CommScope Company

DB846F65ZAXY

Mechanical Specifications

Color

Light gray

Connector Interface

7-16 DIN Female

Connector Location

Rack

Connector Quantity

Duci

Connector Quantity

Wind Loading, maximum 387.0 N @ 100 mph

87.0 lbf @ 100 mph

Wind Speed, maximum

241.4 km/h | 150.0 mph

Dimensions

Depth

215.9 mm | 8.5 in

Length

1828.8 mm | 72.0 in

Width

254.0 mm | 10.0 in

Net Weight

9.5 kg | 21.0 lb

Regulatory Compliance/Certifications

Agency

RoHS 2002/95/EC

China RoHS SJ/T 11364-2006

Classification

Compliant by Exemption

Above Maximum Concentration Value (MCV)





INCLUDED PRODUCTS



DB5083

Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members



DB380

Pipe Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members

DR382NS

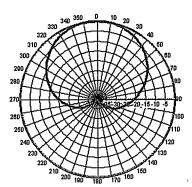
Side Offset Bracket for 4.5 in (114.3 mm) OD round members

Product Specifications

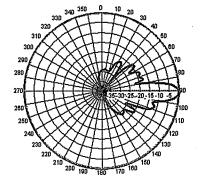
DB846F65ZAXY



Horizontal Pattern

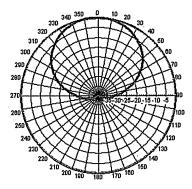


Freq: 850 MHz, Tilt: 0

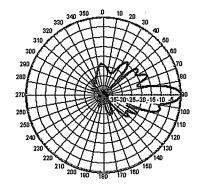


Vertical Pattern

Freq: 850 MHz, Tilt: 0



Freq: 940 MHz, Tilt: 0



Freq: 940 MHz, Tilt: 0

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LPA-185063/12CF

When ordering replace "___" with connector type.

Mechanical specifications

1806 mm	71.1	in
167 mm	6.6	in
148 mm et 176 mm		
6.1 kg	13.5	lbs
0.30 m²	3.3	ft²
0.27 m ²	2.9	ft²
	167 mm 148 mm et 176 mm 6.1 kg 0.30 m ²	167 mm 6.6 148 mm 5.8 et 176 mm 6.9 6.1 kg 13.5 0.30 m ² 3.3

Rated Wind Velocity (Safety factor 2.0) >224 km/hr >139 mph

Wind Load @ 100 mph (161 km/hr)
Fore/Aft 479 N 107.6 lbs
Side 434 N 97.6 lbs

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

Mounting and Downtilting

Mounting brackets attach to a pipe diameter of Ø50-102 mm (2.0-4.0 in).

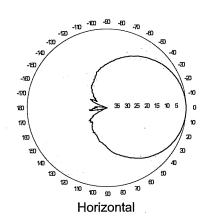
Mounting bracket kit #26799997 Downtilt bracket kit #26799999

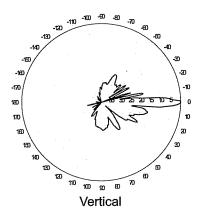
The downtil bracket kit includes the mounting bracket kit.

Electrical specifications

이 화면을 취실한 회장 전체 경찰이 등을 통하는데 그	
Frequency Range	1850-1990 MH
Impedance	50Ω
3) Connector(s)	NE or E-DIN 1 port / center
1) VSWR	≤ 1.4:1
Polarization	Vertical
¹⁾ Gain	18.5 dBi
2) Power Rating	250 W
1) Half Power Angle	
H-Plane	63°
E-Plane	5°
1) Electrical Downtilt	0°
1) Null Fill	10%
Lightning Protection	Direct Ground

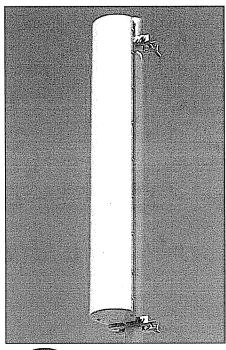
Radiation pattern1)





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:

- True log-periodic design allows for superior front-to-side characteristics to minimize sector overlap.
- 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.

This Amphenol Antel antenna is under a fiveyear limited warranty for repair or replacement.

Antenna available with center-fed connector only.

1) Typical values.

Power rating limited by connector only.

NE indicates an elongated N connector.
 E-DIN indicates an elongated DIN connector.

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.

CF Denotes a Center-Fed Connector.

1850-1990 MHz



Revision Date: 712/07

Swedcom

SLXW 5514

698 - 900 MHz Cross pol. log-periodic antenna

Features

- □ Small size
- ☐ Improved Side-to-side rejection
- □ Suitable for CDMA/GSM/3G/4G
- ☐ High return loss
- □ Low intermodulation
- ☐ High front-to-back ratio
- ☐ Dramatically improved signal to interference performance
- □ Upper side-lobe suppression
- □ Rugged design
- ☐ Outstanding performance over the entire band (698 900 MHz)

Electrical specifications

Frequency range: 698 - 900 MHz
Impedance: 50 ohm
Connector type: 7/16 Din
Return loss: 20 dB
Polarization: +/- 45°
Isolation between ports: 40-60 dB

 Gain:
 14 dBd

 Front-to-back ratio:
 > 30 dB

 Power rating:
 500 W

 H-plane (-3 dB point):
 48 - 54°

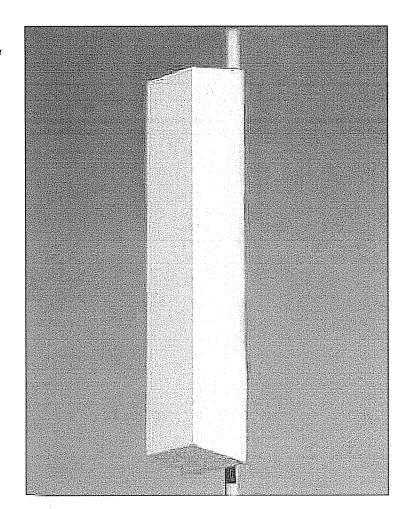
 V-plane (-3 dB point):
 15 - 18°

 Upper side-lobe suppression:
 18 dB

Intermodulation (2x20W): IM3 150 dB

IM5 160 dB IM7/9 170 dB

Lightning protection: DC grounded



Mechanical specifications

Overall height:	80 in	[2032 mm]
Width:	14 in	[356 mm]
Depth:	9 in	[229 mm]
Weight (excluding brackets):	36 lbs	[16.3 Kg]
Wind load measured up to:	150 mph	[240 Km/h]
Wind area (side of antenna):	7.8 sq. ft.	[0.72 sq.m]
Lateral thrust At 113 mph/		
180Km/h (worst case):	397 lbs	[1767 N]

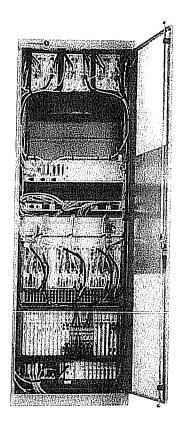
Materials

Radiating Elements: Aluminum

Transformer (Power distribution) Ceramic PCB
Chassis: Aluminum
Radome: Grey Fiberglass/PVC
Mounting bolts: Stainless steel

The SLXW 5514 is made in the U.S.A.

Lucent CDMA Modular Cell 4.0B Indoor For CDMA Networks



Lucent CDMA Modular Cell 4.0B is a high capacity base station equipped with the state-of-the-art technologies developed by Bell Labs. The product brings you outstanding carrier density and immediate OPEX savings. This indoor product can support up to 8 carriers/3 sectors per frame. It is twice the density of Modular Cell 4.0 (indoor). Modular Cell 4.0B offers full spectrum coverage in a single frame, dramatically simplifying growth patterns. As the leader in spread spectrum technology, Lucent Technologies continues to introduce innovations to the market: Multi-Carrier Radio (15MHz), Block Filters/Wideband Filters, and 40W Power Amplifier Modules are the latest assets integrated in the base station.

Features

The Modcell 4.0B indoor version offers a small footprint with exceptional carrier density in a standard ETSI cabinet.

- Indoor Single Frame Configuration
- 1-8 carriers per frame at 3 sectors (will support up to 11 carriers with Auxiliary Amplifier Frame)
- Dual Band: one cell to the ECP & mobile
- · Close Loop Gain Control
- · Timing and Controller Redundancy
- Integrated Power option
- Support CDMA2000™1X, and EV-DO Rev.0, with future support to EV-DO Rev. A
- IP Backhaul and Ethernet Backhaul capable
- o 6-Sector option ready
- · Intelligent Antenna option ready

Benefits

- Optimized for highest carrier density, smooth growth in one frame
- Conserves indoor footprint, reducing hardware and floor space requirements
- Minimizes configuration complexity
- Software-Only Carrier Add at certain carrier counts
- Flexible channel growth planning
- Designed to use existing power supply
- Grow CDMA carriers on only 2 antennas/sector
- Multi-Carrier Radio (15MHz), Block Filters/ Wideband Filters, and 40W Power Amplifier Modules



Technical Specifications

Description

Specification

 Configurations 	1		Co	nfi	αι	ıra	tio	ns
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a. Sectors

b. Carriers

2. CDMA Channel Card Capacity

3. T1, E1 Facilities

4. User Alarms

5. GPS Antenna

6. Air Interface Standards

7. Frequency Bands

8. Vocoder

9. Environmental Cabinet Housing

10. Cabinet Access

11. Operating Temperature Range

12. Dimensions

13. Estimated Installed Weight

14. Power Options

15. Power Consumption

a. 3 Carrier/3 Sectorsb. 6 Carrier/3 Sectorsc. 11 Carrier/3 Sectors

16. RF Power (at J4)

17. Minimal Antenna Configuration

18. Filter

19. Growth Frame

20. Operational Accessories

21. Channel Elements

3. 4 and 6

1-8 per frame at 3 sectors (up to 11 with

Auxiliary Amplifier Frame)

12 slots; CMU IVB capable

Maximum of 20 per cabinet when equipped

with URC-II's

7 Power Alarms, 25 User Alarms

Yes

T1A/E1A 95-A plus TSB-74; T1A/E1A 95-B for

850 MHz; CDMA 2000

850MHz/1900 MHz;

300 to 2100 MHz capable

8 Kbps; 8 Kbps EVRC; 13 Kbps; SMV-readv

Standard ETSI cabinet; UL50 compliant;

zero rear clearance

Front Access

Range: -5 to +40°C (continuous)

600 mm W x 600 mm D x 1880 mm H

(23.6 x 23.6 x 74) inches

365 kg (785 lbs.) DC [8 carriers in one cabinet]

Integrated Power, AC 120/240 Volt Input,

-48V or +24 V DC Conversion Non-integrated Power requires either + 24 VDC Input or - 48 VDC Input

2167 W 5449 W

10026 W

25 W per carrier (850) FCC Rated

short-term average

20 W per carrier (850) FCC Rated

long-term average

20 W per carrier (1900) FCC Rated

short-term average

16 W per carrier (1900) FCC Rated

long-term average

2 antennas/sector

Block and Wide Band Dual Duplex

PCS AUX Frame, Dual Band

Growth Frame

Integrated Power

Channel pooling across sectors or carriers

To learn more about our comprehensive portfolio, please contact your Lucent Technologies Sales Representative or visit our web site at http://www.lucent.com.

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MOB-Mod4B-i 0106



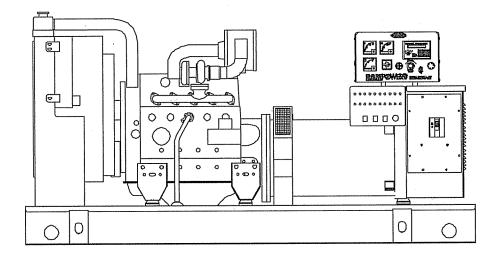


SD060

Liquid Cooled Diesel Engine Generator Sets

Standby Power Rating **60KW 60 Hz**

Prime Power Rating
48KW 60 Hz



Power Matched DEERE 3.0 DTA ENGINE

Turbocharged / Aftercooled

<u>VERIZON WIRELESS</u> 60 kW Diesel Models: 04812-3 120/240 1ø Open Set

04813-3 120/208 1ø Acoustic Enclosed 04864-3 120/208 3ø Open Set 04865-3 120/208 3ø Acoustic Enclosed

FEATURES

- INNOVATIVE DESIGN & PROTOTYPE TESTING are key components of GENERAC'S success in "IMPROVING POWER BY DESIGN." But it doesn't stop there. Total commitment to component testing, reliability testing, environmental testing, destruction and life testing, plus testing to applicable CSA, NEMA, EGSA, and other standards, allows you to choose GENERAC POWER SYSTEMS with the confidence that these systems will provide superior performance.
- TEST CRITERIA:
 - ✓ PROTOTYPE TESTED
 - ✓ SYSTEM TORSIONAL TESTED
 - ✓ ELECTRO-MAGNETIC INTERFERENCE
 - ✓ NEMA MG1-22 EVALUATION
 - ✓ MOTOR STARTING ABILITY
 - ✓ SHORT CIRCUIT TESTING
 - ✓ UL 2200
- SOLID-STATE, FREQUENCY COMPENSATED VOLTAGE REGULATION. This state-of-the-art power maximizing regulation system is standard on all Generac models. It provides optimized

- FAST RESPONSE to changing load conditions and MAXIMUM MOTOR STARTING CAPABILITY by electronically torque-matching the surge loads to the engine.
- SINGLE SOURCE SERVICE RESPONSE from Generac's dealer network provides parts and service know-how for the entire unit, from the engine to the smallest electronic component. You are never on your own when you own an GENERAC POWER SYSTEM.
- **ECONOMICAL DIESEL POWER.** Low cost operation due to modern diesel engine technology. Better fuel utilization plus lower cost per gallon provide real savings.
- LONGER ENGINE LIFE. Generac heavy-duty diesels provide long and reliable operating life.
- GENERAC TRANSFER SWITCHES, SWITCHGEAR AND ACCESSORIES. Long life and reliability is synonymous with GENERAC POWER SYSTEMS. One reason for this confidence is that the GENERAC product line includes its own transfer systems, accessories, switchgear and controls for total system compatibility.





APPLICATION & ENGINEERING DATA

SD060

GENERATOR SPECIFICATIONS

TYPE
STATOR INSULATION Class H
TOTAL HARMONIC DISTORTION<3%
TELEPHONE INTERFERENCE FACTOR (TIF)<50
ALTERNATOR Self-ventilated and drip-proof
BEARINGS (PRE-LUBED & SEALED)1
COUPLING Direct, Flexible Disc
LOAD CAPACITY (STANDBY) 100%
LOAD CAPACITY (PRIME) 110%

NOTE: Emergency loading in compliance with NFPA 99, NFPA 110, paragraph 5-13.2.6. Generator rating and performance in accordance with ISO8528-5, BS5514, SAE J1349, ISO3046 and DIN6271 standards.

EXCITATION SYSTEM

- ☐ PERMANENT MAGNET EXCITER Eighteen pole exciter ✓

 Magnetically coupled DC current ✓

 Mounted outboard of main bearing ✓

GENERATOR FEATURES

- Four pole, revolving field generator, directly connected to the engine shaft through a heavy-duty, flexible disc for permanent alignment.
- Generator meets the temperature rise standards for class "F" insulation as defined by NEMA MG1-32.6, while the insulation system meets the requirements for the higher class "H" rating.
- All prototype models have passed a three-phase symmetrical short circuit test to assure system protection and reliability.
- All prototype models are tested for motor starting ability by measuring the instantaneous voltage dip with a waveform data acquisition system.
- All models utilize an advanced wire harness design for reliable interconnection within the circuitry.
- Magnetic circuit, including amortisseur windings, tooth and skewed stator design, provides a minimal level of waveform distortion and an electromagnetic interference level which meets accepted requirements for standard AM radio, TV, and marine radio telephone applications.
- Voltage waveform deviation, total harmonic content of the AC waveform, and T.I.F. (Telephone Influence Factor) have been evaluated to acceptable standards in accordance with NEMA MG1-32.
- Maternator is self-ventilated and drip-proof constructed.
- Fully life-tested protective systems, including "field circuit and thermal overload protection" and optional main-line circuit breakers capable of handling full output capacity.
- System Torsional acceptability confirmed during Prototype Testing.

ENGINE SPECIFICATIONS

LINGUIAL OF FOUNDATIONS
MAKE GENERAC/DEERE
MODEL
CYLINDERS5
DISPLACEMENT
BORE
STROKE
COMPRESSION RATIO
INTAKE AIR
NUMBER OF MAIN BEARINGS5
CONNECTING RODS
CYLINDER HEAD
PISTONS
CRANKSHAFT Die Forged, Induction Hardened Steel
CHANNOLIAL I
VALVE TRAIN
LIFTER TYPE
INTAKE VALVE MATERIAL Heat Resistant Steel
EXHAUST VALVE MATERIAL Heat Resistant Steel
HARDENED VALVE SEATS Replaceable
ENGINE GOVERNOR
☐ ELECTRONIC Standard
FREQUENCY REGULATION, NO-LOAD TO FULL LOAD 0.5%
STEADY STATE REGULATION ±0.33%
LUBRICATION SYSTEM
TYPE OF OIL PUMP
OIL FILTER Full flow, Cartridge
CRANKCASE CAPACITY
OTHER OF ICE OF THE PROPERTY O
COOLING SYSTEM
TYPE OF SYSTEM Pressurized, Closed Recovery
WATER PUMP Pre-Lubed, Self-Sealing
TYPE OF FAN
NUMBER OF FAN BLADES6
DIAMETER OF FAN
COOLANT HEATER
COOLANT REATER 120V, 1000 W
FUEL SYSTEM
FUEL #2D Fuel (Min Cetane #40)
(Fuel should conform to ASTM Spec.)
FUEL FILTER 5 Micron
FUEL INJECTION PUMP Bosch, Unit type cam driven
FUEL PUMP Mechanical
INJECTORS Multi-Hole, Nozzle Type
ENGINE TYPE
FUEL LINE (Supply)
FUEL RETURN LINE
TOLE TILTOTHY ENVELOPE THAT (S.E.S. THAT)
ELECTRICAL SYSTEM
BATTERY CHARGE ALTERNATOR 20 Amps at 12 V
STARTER MOTOR 12 V
RECOMMENDED BATTERY 12 Volt, 90 A.H., 27F
GROUND POLARITY Negative

GROUND POLARITY......Negative

Rating definitions - Standby: Applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. (All ratings in accordance with BS5514, ISO3046 and DIN6271). Prime (Unlimited Running Time): Applicable for supplying electric power in lieu of commercially purchased power. Prime power is the maximum power available at variable load. A 10% overload capacity is available for 1 hour in 12 hours. (All ratings in accordance with BS5514, ISO3046, ISO8528 and DIN6271).



OPERATING DATA

	STANDBY		PRII	
	SD060		SD0	60
GENERATOR OUTPUT VOLTAGE/KW-60Hz 120/240V, 1-phase, 1.0 pf 120/208V, 3-phase, 0.8 pf Reference dealer for additional voltages.	60 60	ted AMP 250 208	48 48	Rated AMP 200 166
MOTOR STARTING KVA Maximum at 35% instantaneous voltage dip with optional alternator; 60 Hz	<u>120/208/240V</u> 164			9 <mark>8/240V</mark> 64
FUEL Fuel consumption—60 Hz Load gal./hr. liters/hr. Fuel pump lift	100 <u>%</u> 4.8 18.2 36"	80% 3.8 14.4	<u>100%</u> 4.1 15.5	80% 3.3 12.5
COOLING Coolant capacity System - lit. (US gal.) Engine - lit. (US gal.) Coolant flow/min. 60 Hz - lit. (US gal.) Heat rejection to coolant 60 Hz full load BTU/hr. Inlet air to radiator 60 Hz - m³/min. (cfm) Max. air temperature to radiator °C (°F) Max. ambient temperature °C (°F)	17.0 (4.5) 10.4 (2.75) 106 (28) 120,500 212 (7,500) 60 (140) 48.9 (120)		10.4 106	(28) 500 7,500) 140)
COMBUSTION AIR REQUIREMENTS Flow at rated power 60 Hz - cfm	209		16	68
EXHAUST Exhaust flow at rated output 60 Hz - m³/min. (cfm) Max recommended back pressure "Hg Exhaust temperature 60 Hz (full load) °C (°F) Exhaust outlet size	18 (533) 1.5 524 (975) 3.0" O.D.		1 459	(450) .5 (858) O.D.
ENGINE Rated RPM 60 Hz HP at rated KW 60 Hz Piston speed 60 Hz - ft./min. BMEP 60 Hz - psi	1800 96 1230 227		12	300 30 330 89
DERATION FACTORS Temperature 5% for every 10°C above - °C 2.77% for every 10°F above - °F Altitude	25 77		l l	25 77
1.1% for every 100 m above - m 3.5% for every 1000 ft. above - ft.	1067 3500		1	067 500

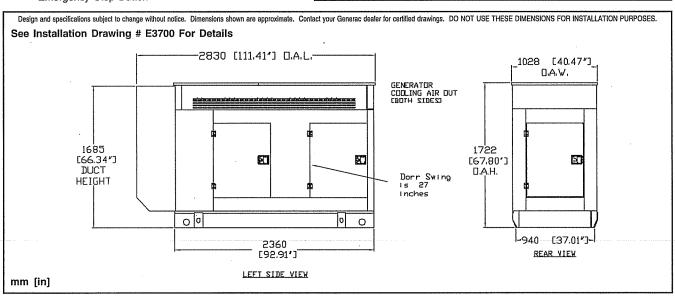
- High Coolant Temperature Automatic Shutdown
- Low Coolant Level Automatic Shutdown
- Low Oil Pressure Automatic Shutdown
- Overspeed Automatic Shutdown (Solid-state)
- Crank Limiter (Solid-state)
- Oil Drain Extension
- Radiator Drain Extension
- Factory-Installed Cool Flow Radiator
- Closed Coolant Recovery System
- **UV/Ozone Resistant Hoses**
- Rubber-Booted Engine Electrical Connections
- Secondary Fuel Filter
- Fuel Shutdown Solenoid
- Batteries 2 12 Volt 90 AH
- Stainless Steel Flexible Exhaust Connection
- Battery Charge Alternator
- Battery Cables
- Composite Battery Box
- Vibration Isolation of Unit to Mounting Base
- 24 Volt, Solenoid-Activated Starter Motor
- Air Cleaner
- Air Cleaner Service Indicator
- Fan Guard (CSA Compliant)
- CSA Guarding
- Critical Grade Muffler (Shipped Loose With Open Unit)
- High Temperature Exhaust Wrap
- Alternator Tropicalization
 - · Resists Moisture, Fungus and Abrasives
 - In Addition to Standard Class H Epoxy Impregnation Coating
- Upsized Alternator For Increased Motor Starting
- Propylene Glycol 50/50 Mix Antifreeze
- Oil (19.0 Quarts)
- Coolant Expansion and Recovery Tank
- Extended Factory Test (2.5 Hr.)
 - Stepped Loads
 - · Frame Temperature Test
- Specification Sheet Does Not Reflect Any Verizon Wireless Corporate Authorized Variances.
- "E" Control Console Digital/Analog Hybrid
 - · Communication Software for Remote Access
 - · Analog Reading AC Volts
 - · Analog Reading AC Amps
 - Analog Frequency
 - · Emergency Stop Button

- Audible Alarm
- 11 Gauge Control Panel Enclosure
- Programmable Engine Control (See Bulletin #0161310SBY For Details)
- 20 Light Annunciator Generator Alarms
- 8 Form C Dry Contact Output Relays
- 120 Volt Coolant Heater 1800 Watt with 3 Wire Connection Cord
- Mainline Circuit Breaker
 - 200 Amp & 100 Amp 120/240 Single Phase
 - 200 Amp & 50 Amp 120/208 Three Phase
- **■** Flexible Fuel Lines
- Fuel Pressure Loss Protection System
- UL2200 Listed
- Basetank
 - · 48 Hr. Runtime at 100% Load
 - Double Wall
 - 125% Engine Fluid Containment and Alarms of all Generator Liquids
 - · Fuel Level Sender and Visible Level Gauge
 - Rupture Basin Alarm
 - Emergency Vents
 - · Check Valve (inlet and return)
 - FM Fusible Link (165°F) Shutoff
 - UL 142 Listed
 - Southern California limitation of 52 gallons

Consult State and Local Codes for Specific Requirements in your area.

- Five Year Extended Warranty
- **■** Enclosure Options
 - Open Generator Set w/ Duct Adapter
 - Weather Protective Sound Attenuated Enclosure w/ Enclosed Critical Grade Muffler and Flex Exhaust
- 24V Duel-Rate 10 Amp Battery Charger With 120V 3 Wire Connection Cord





GENERAC* POWER SYSTEMS, INC. • P.O. BOX 8 • WAUKESHA, WI 53187

Site Search Summary 36 Ritch Avenue Facility Greenwich, Connecticut

Section 16-50j-74(j) of the Regulations of Connecticut State Agencies requires the submission of a statement that describes "the narrowing process by which other possible sites were considered and eliminated." In accordance with this requirement, descriptions of the general site search process, the identification of the applicable search area and the alternative locations considered for development of the proposed telecommunications facility in the Town of Greenwich are provided below.

Site Search Process

To initiate its site selection process in an area where wireless service problems have been identified, Cellco first establishes a "site search ring" or "site search area." In any search ring or search area, Cellco seeks to avoid the unnecessary proliferation of towers and to reduce the potential adverse environmental effects of the cell site, while at the same time maximizing the quality of service provided from a particular facility. These objectives are achieved by initially locating existing towers and other sufficiently tall structures within and near the site search area. If any are found, they are evaluated to determine whether they are capable of supporting Cellco's telecommunications equipment at a location and elevation that satisfies its technical requirements.

Cellco maintains five (5) existing telecommunications facilities within approximately four (4) miles of the proposed Ritch Avenue Facility. None of these existing facilities, however, can provide the service needed in the identified problem areas along portions of Interstate 95 ("I-95"), Route 1 and local roads, as well as industrial, commercial, recreational and residential land uses in southwest Greenwich. (See Attachment 6).

Existing Cellco Telecommunication Facilities

	Owner (Cellco Site Name)	Facility <u>Height and Type</u>	Location	Cellco <u>Antenna Height</u>
1.	411 Properties LLC (Greenwich SW)	61' (Roof-top)	411 West Putnam Avenue Greenwich, CT	55'
2.	Greenwich Plaza (Greenwich South)	100' (Roof-Top)	1 Greenwich Plaza Greenwich, CT	106'
3.	Connecticut Light and Power (Greenwich 3)	150° (Powermount)	9 Sound Shore Drive Greenwich, CT	138'

	Owner (Cellco Site Name)	Facility <u>Height and Type</u>	Location	Cellco <u>Antenna Height</u>
4.	Greenwich Hospital (Greenwich)	164' (Monopole)	5 Perryridge Road Greenwich, CT	124'
5.	Wind Building (Riverside)	55' (Roof-Top)	1111 East Putnam Avenue Greenwich, CT	47'

If existing towers or structures are not available or technically feasible, other locations are investigated where the construction of a new tower is required to satisfy Cellco's service objectives. The list of available locations may be further reduced if, after preliminary negotiations, the property owners withdraw a site from further consideration. From among the remaining locations, the proposed sites are selected by eliminating those that have greater potential for adverse environmental effects and fewer benefits to the public (i.e., those requiring taller towers, possibly with lights; those with substantial adverse environmental impacts, or in densely populated residential areas; and those with limited ability to share space with other public or private telecommunications entities). It should be noted that in any given site search, the weight afforded to factors considered in the selection process will vary depending upon the availability and nature of sites within the search area.

Identification of the Ritch Avenue Search Area

The purpose of the proposed Ritch Avenue Facility is to provide reliable PCS, cellular and LTE wireless services to significant gaps that have been identified along portions of I-95, Route 1 and local roads, as well as industrial, commercial, recreational and residential areas, in southwest Greenwich. These coverage gaps were identified using system performance data including, but not limited to, baseline drive data and Cellco's best server propagation modeling tool.

Cellco issued its Ritch Avenue search area in December of 2004. (See attached search area map). As a matter of practice, Cellco's initial site search effort focuses on municipal or other quasi-public properties that might be available or appropriate locations for a telecommunications facility. If no public properties are available or suitable for use, Cellco investigates private land within a search area. Because AT&T already maintains a telecommunications facility at 36 Ritch Avenue, Cellco's site search effort focused, in large part, on ways to modify the existing facility. This approach was deemed to be more favorable than building a second telecommunications facility in southwest Greenwich.

Sites Investigated in Southwest Greenwich

In addition to the existing facilities listed above, and the existing AT&T facility, Cellco identified and investigated three (3) alternative sites in southwest Greenwich.

1. 36 Ritch Avenue, Greenwich, CT

This is the site of the existing AT&T 70-foot single-carrier flagpole tower, and the proposed 77-foot multi-carrier "tree tower" proposed by Cellco. The new tower would be shared by Cellco, AT&T, T-Mobile and the Greenwich Police Department. The existing tower is not capable of supporting any additional carrier.

2. 104/124 Ritch Avenue, Greenwich, CT

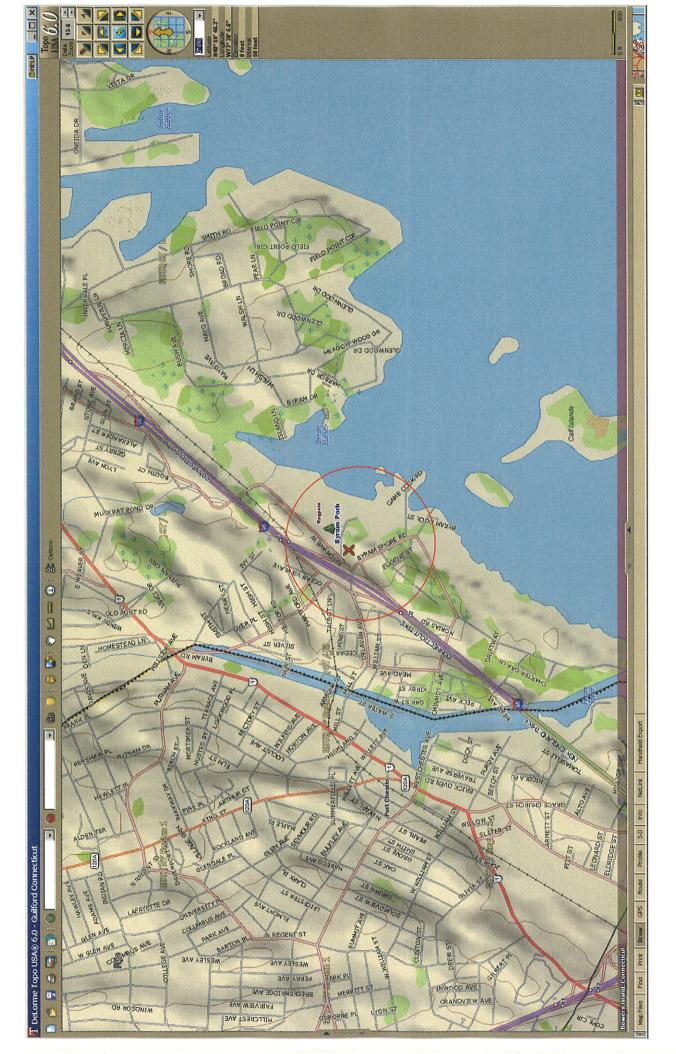
This site is located to the northeast of the proposed cell site location at 36 Ritch Avenue and is occupied by a residential condominium complex. Cellco explored the use of the roof of the existing building at this site and the development of a new tower adjacent to I-95. Following a series of discussions regarding a possible lease, the owner withdrew the site from consideration.

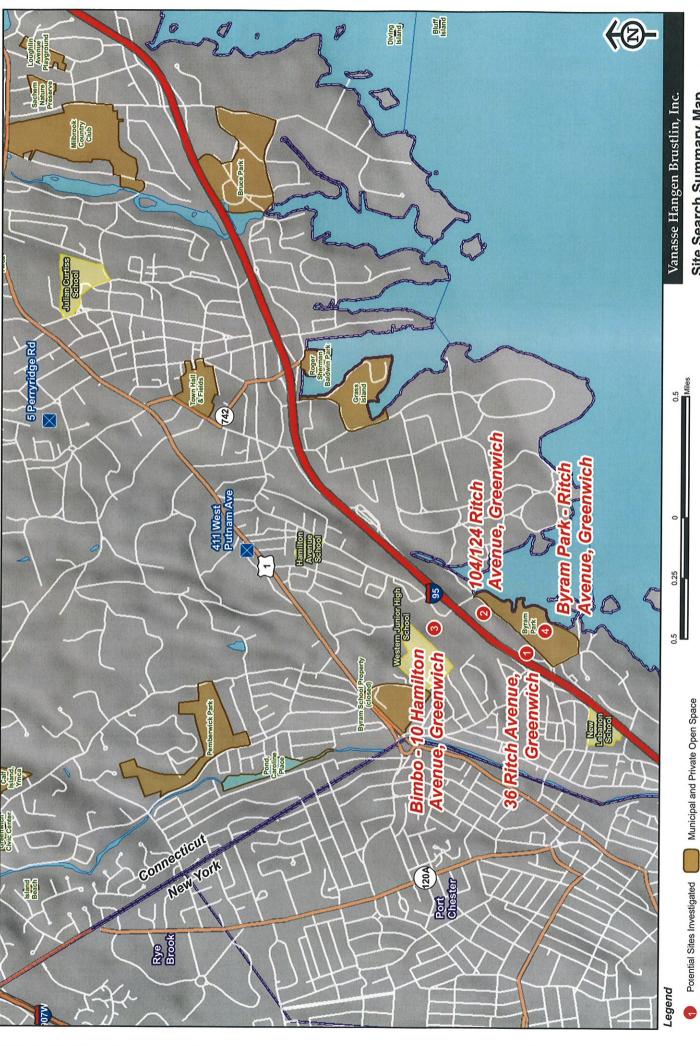
3. Bimbo Bakery – 10 Hamilton Avenue, Greenwich, CT

This site is the location of an existing commercial/industrial bakery located north of I-95 and northeast of the proposed cell site at 36 Ritch Avenue. Cellco was considering the installation of a small tower on the roof of the bakery building. After lengthy negotiations, Cellco and the property owner could not agree on lease terms.

4. Byram Park – Ritch Avenue, Greenwich, CT

Cellco explored the use of land adjacent to the existing ball field in the Townowned Byram Park. This alternative was abandoned after Cellco determined it would need a 150-foot tower at this location to satisfy its coverage objectives in southwest Greenwich.





Telecommunications Facility **Proposed Verizon Wireless** Site Search Summary Map 36 Ritch Avenue Greenwich, Connecticut

School

State Forest/Park



Open Water

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