

# **MGD3-800TX**

1710-1880	1850-1990	1920-2170
H66° V7.2°	H64º V6.6º	H63º V6.3º
Fixed Tilt 0 °2, °4, °6, °	Fixed Tilt 0°2,°4,°6,°	Fixed Tilt 0°2.°4.°6.°

# **ELECTRICAL SPECIFICATIONS**

### BROADBAND 1710-2170 MHz

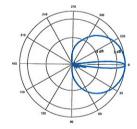
Antenna Model	MGD3-800TX		
Polarization		± 45°	
Frequency	1710 - 1880	1850 - 1990	1920 - 2170
Horizontal Beamwidth	66°	640	63°
Vertical Beamwidth	7.20	6.60	6.30
Gain (dBi)	17.9	18	18.5
Vertical Electrical Tilt	FIXED 0°, 2°, 4°, 6°	FIXED 0°, 2°, 4°, 6°	FIXED 0°, 2°, 4°, 6°
Upper Sidelobe Suppression for the 1 <sup>st</sup> lobe above main beam (dB)	20	20	20
Front-to-Back Ratio /Cpol @ ± 20° (dB)	> 30	> 30	> 30
VSWR	< 1.4 : 1	< 1.4 : 1	< 1.4 : 1
Cross Polar Ratio @ ± 60° (dB)	> 10	> 10	> 10
Isolation Between Ports (dB)	> 30	> 30	> 30
Maximum Power Per Input (W)		250	
Intermodulation (dBc)		< - 150	
Impedance (Ω)	50		

### **MECHANICAL SPECIFICATIONS**

Connectors	2 X 7/16 Female
Connector Position	Bottom
Survival Wind Speed mph (km/h)	124 (200)
Front Windload lbs (N) @ 160 km/h	83 (370)
Lateral Windload Ibs (N) @ 160 km/h	38 (170)
Radome Color	Grey, paintable
Temperature Range F (°C)	-67° to 140° (-55° to +60°)
Humidity	100%
Antenna Weight Ibs (kg)	15.43 (7)
Antenna Dimension in (mm) H X W X D	53 X 6.29 X 3.54 (1340 X 160 X 90)



H&V Pattern



s. de

2 5 2



# BXA-80063-6CF-EDIN-X

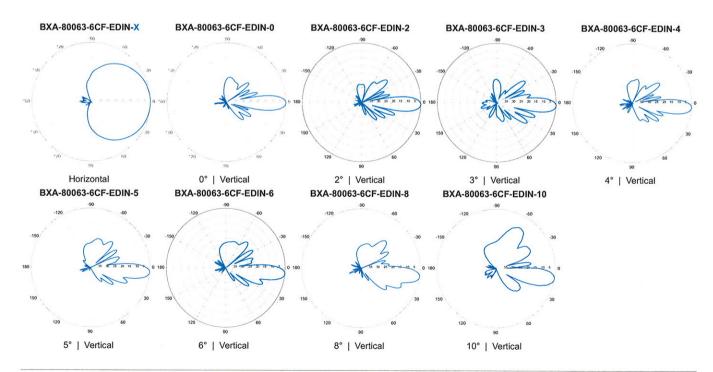
### X-Pol | FET Panel | 63° | 14.5 dBd

**Electrical Characteristics** Frequency bands 806-900 MHz\* \*Optional frequency band for iDEN 806-941 MHz (specify when ordering) Polarization ±45° Horizontal beamwidth 63° Vertical beamwidth 11° Gain 14.5 dBd (16.6 dBi) Electrical downtilt (X) 0, 2, 3, 4, 5, 6, 8, 10 Impedance 50Ω **VSWR** ≤1.4:1 Upper sidelobe suppression (0°) -18.2 dB Front-to-back ratio (+/-30°) -36.3 dB Null fill 5% (-26.02 dB) Isolation between ports < -25 dB Input power 500 W Lightning protection Direct Ground Connector(s) 2 Ports / EDIN or NE / Female / Center (Back) **Mechanical Characteristics** Dimensions Length x Width x Depth 1804 x 285 x 132 mm 71.0 x 11.2 x 5.2 in Depth with z-brackets 172 mm 6.8 in Weight without mounting brackets 7.9 kg 17 lbs Survival wind speed > 201 km/hr > 125 mph Wind area Front: 0.51 m<sup>2</sup> Side: 0.24 m<sup>2</sup> Front: 5.5 ft2 Side: 2.6 ft2 Wind load @ 161 km/hr (100 mph) Front: 759 N Side: 391 N Front: 169 lbf Side: 89 lbf **Mounting Options** Part Number Fits Pipe Diamete 3-Point Mounting Bracket Kit 36210003 50-160 mm 2.0-6.3 in 6.3 kg 14 lbs 3-Point Downtilt Bracket Kit (0-14°) 36210004 50-160 mm 2.0-6.3 in 16 lbs 7.3 kg **Downtilt Mounting Applications** A mounting bracket and downtilt bracket kit must be ordered for downtilt applications **Concealment Configurations** For concealment configurations, order BXA-80063-6CF-EDIN-X-FP

Replace "X" with desired electrical downtilt.

Antenna is also available with NE connector(s). Replace "EDIN" with "NE" in the model number when ordering.





Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

# **Mechanical specifications**

Length	1804	mm	71.0	in
Width	285	mm	11.2	in
Depth Depth with z-bracket	114 154	mm mm	4.5 6.1	LOS TOP AND A STATE OF THE PARTY OF THE PART
Weight 4)	7.9	kg	17.0	lbs
Wind Area Fore/Aft Wind Area Side	0.51 0.21		5.5 2.2	
Max Wind Survivability	>201	km/hr	>125	mph
Wind Load @ 100 n	nph (1	61 km/	hr)	
Fore/Aft	753	N	169	lbf
Side	351	N	79	lbf

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

### **Mounting & Downtilting**

Mounting hardware attaches to pipe diameter Ø50-160 mm; Ø2.0-6.3 in

Mounting Bracket Kit 36210002 Downtilt Bracket Kit 36114003

# **Electrical specifications**

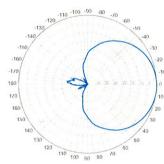
Frequency Range	696-900 MHz
Impedance	50Ω
Connector 3)	NE or E-DIN Female 2 ports / Center
VSWR 1)	≤ 1.35:1
Polarization	Slant ±45°
Isolation Between Ports 1)	< -25 dB
Gain 1)	14.5 dBd 16.5 dBi
Power Rating 2)	500 W
Half Power Angle 1)	
Horizontal Beamwidth Vertical Beamwidth	63° 11°
Electrical downtilt 5)	0°
Null fill 1)	5%
Lightning protection	Direct ground

Patented Dipole Design: U.S. Patent No. 6,608,600 B2

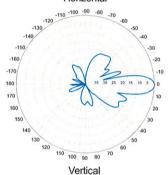
- 1) Typical values.
- 2) Power rating limited by connector only.
- 3) NE indicates an elongated N connector. E-DIN indicates an elongated DIN connector.
- 4) Antenna weight does not include brackets.5) Add'l downtilts may be available. Check website for details.

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

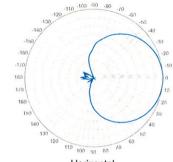
### Radiation-pattern<sup>11</sup> 750 MHz



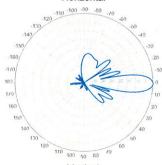
Horizontal



850 MHz



Horizontal

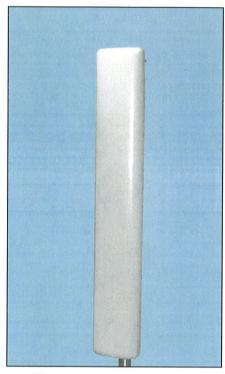


Vertical

696-900 MHz

# BXA-70063/6CF

When ordering replace "\_\_" with connector type.





Featuring our Exclusive 3T Technology™ Antenna Design:

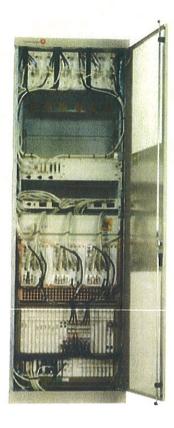
- · Watercut brass feedline assembly for consistent performance.
- Unique feedline design eliminates the need for conventional solder joints in the signal path.
- · A non-collinear system with access to every radiating element for broad bandwidth and superior performance.
- · Air as insulation for virtually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

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

Revision Date: 01/08/09



# 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
- · 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**

2. CDMA Channel Card Capacity

### Description

### Specification

4	C	
1.	Confid	urations

a. Sectors

b. Carriers

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

Power Consumption
 a. 3 Carrier/3 Sectors

b. 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-ready

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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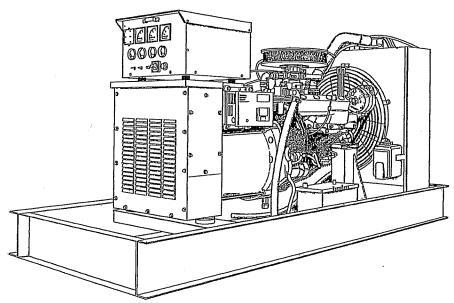
MOB-Mod4B-i 0106



# **SG060**

# **Liquid Cooled Gas Engine Generator Sets**

Standby Power Rating 60KW 60 Hz



Power Matched

# **GENERAC 6.8 GN ENGINE**

**Naturally Aspirated** 

### **VERIZON WIRELESS MODELS**

### **NATURAL GAS**

4816 - 120/240 - 1ø Open

4817 - 120/240 - 1ø Sound Encl.

4874 - 120/208 - 3ø Open

4875 - 120/208 - 3ø Sound Encl.

### LP VAPOR

4931 - 120/240 - 1ø Open

4932 - 120/240 - 1ø Sound Encl.

4935 - 120/208 - 3ø Open

4936 - 120/208 - 3ø Sound Encl.

# **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 EVALUATION
  - ✓ MOTOR STARTING ABILITY
  - ✓ SHORT CIRCUIT TESTING
  - ✓ UL 2200 COMPLIANCE AVAILABLE

- SOLID-STATE, FREQUENCY COMPENSATED DIGITAL 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 a GENERAC POWER SYSTEM.
- 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

SG060

# **GENERATOR SPECIFICATIONS**

TYPEFour-pole, revolving field
ROTOR INSULATION Class H
STATOR INSULATIONClass H
TOTAL HARMONIC DISTORTION<3%
TELEPHONE INTERFERENCE FACTOR (TIF)<50
ALTERNATORSelf-ventilated and drip-proo
BEARINGS (PRE-LUBED & SEALED)
COUPLING Direct, Flexible Disc
LOAD CAPACITY (STANDBY)100%
LOAD CAPACITY (PRIME)110%

NOTE: Generator rating and performance in accordance with ISO8528-5, BS5514, SAE J1349, ISO3046, and DIN6271 standards.

# **VOLTAGE REGULATOR**

TYPE	Full Digital
	3 Phase
REGULATION	± 1/4%
FEATURES	Built into H-100 Control Panel
	V/F Adjustable
	Adjustable Voltage and Gain

# **GENERATOR FEATURES**

- ☐ Revolving field heavy duly generator
- ☐ Operating temperature rise 120 °C above a 40 °C ambient
- ☐ Insulation is Class H rated at 150 °C rise
- ☐ All prototype models have passed three phase short circuit testing

# **CONTROL PANEL FEATURES**

# ☐ TWO FOUR LINE LCD DISPLAYS READ:

- · Voltage (all phases)
- Power factorkVAR
- Engine speed
- Run hours
- · Fault history
- · Coolant lemperature
- Low oil pressure shuldown
- Overvoltage
- Low coolant level
- Not in auto position (flashing light)
- ATS selection

- Current (all phases)
- kW
- Transfer switch status
- Low fuel pressure
- Service reminders
- Oil pressure
- Time and date
   High spelled temperate
- High coolant temperature shutdown
- Overspeed
- · Low coolant level
- Exercise speed

### ☐ INTERNAL FUNCTIONS:

- IPT function for alternator protection from line to neutral and line to line short circuits
- · Emergency stop
- · Programmable auto crank function
- · 2 wire start for any transfer switch
- · Communicates with the Generac HTS transfer switch
- Built-in 7 day exerciser
- · Adjustable engine speed at exerciser
- RS232 port for GenLink' control
- RS485 port remote communication
- · Canbus addressable
- · Governor controller and voltage regulator are built into the master control board
- Temperature range -40 °C to 70 °C

# **ENGINE SPECIFICATIONS**

MAKE	GENERAC
MODEL	6.8GN
CYLINDERS	V-10
DISPLACEMENT	6.8 Liter (417 cu. in.)
BORE	90.2 mm (3.55 in.)
STROKE	105.8 mm (4.17 in.)
COMPRESSION RATIO	9:1
INTAKE AIR	Naturally Aspirated
NUMBER OF MAIN BEARINGS	6
CONNECTING RODS	
CYLINDER HEAD	Aluminum
PISTONS	
CRANKSHAFT	Forged Steel
<u>VALVE TRAIN</u>	
CAM POLLOWER	Hydraulic

CAM POLLOWER	Hydraulic
INTAKE VALVE MATERIAL	Copper Infiltrated Iron Base
EXHAUST VALVE MATERIAL	Copper Infiltrated Iron Base
HARDENED VALVE SEATS	Standard

#### **ENGINE GOVERNOR**

FREQUENCY REGULATION	ON, NO-LOAD TO FULL LOA	D0.5%
STEADY STATE REGULA	TION	±0.25%

### **LUBRICATION SYSTEM**

TYPE OF OIL PUMP	Gerotor
OIL FILTER	Full flow, Spin On Cartridge
CRANKCASE CAPACITY	(6 qts.)

### COOLING SYSTEM

TYPE OF SYSTEM	Pressurized, closed recovery
WATER PUMP	Pre-lubed, self-sealing
TYPE OF FAN	Pusher
NUMBER OF FAN BLADES	6
DIAMETER OF FAN	558.8 mm (22 in.)
COOLANT HEATER	120V, 1500 W

### **FUEL SYSTEM**

### **FUEL**

σ	Natural Gas or L.P. Vapor	Standard
	L.P. Liquid Withdrawal	
	ARBURETOR	•
SEC	ECONDARY FUEL REGULATOR Nat. Gas or I	P. Vapor Systems
HO.	OT WATER VAPORIZERL.P. Liquid W	ithdrawal Systems
AU7	UTOMATIC FUEL LOCKOFF SOLENOID	Standard
OP	PERATING FUEL PRESSURE VAPOR SYSTEMS	7" to 14" H <sub>2</sub> O

### **ELECTRICAL SYSTEM**

BATTERY CHARGE ALTERNATOR.	18 Amps at 12 V
STARTER MOTOR	12 V
RECOMMENDED BATTERY	(1) - 12 V, 700 CCA, 27F
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).



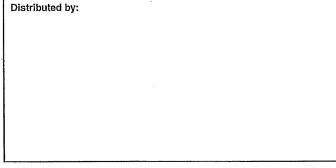
# **OPERATING DATA**

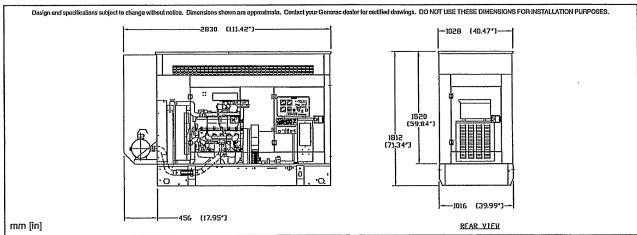
	STANDBY		STANDBY	
	SG	060	SG	060
GENERATOR OUTPUT VOLTAGE/KW-60Hz 120/240V, 1-phase, 1.0 pf 120/208V, 3-phase, 0.8 pf NOTE: Consult your Generac dealer for additional	<u>NG</u> 60 60	Rated AMP 250 208	<u>LPG</u> 60 60	<u>Rated AMP</u> 250 208
MOTOR STARTING KVA Maximum at 35% instantaneous voltage dip with standard alternator—60 Hz	<u>240V</u> 110	<u>480V</u> 146	<u>240V</u> 110	<u>480V</u> 146
FUEL Fuel consumption—60 Hz—100% Load ft.³ hr. / gal. hr.	<u>NG</u> 925 / NA		<u>LPG</u> 334 / 9.1	
COOLING  Coolant capacity System - lit. (US gal.) Engine - lit. (US gal.) Radiator - lit. (US gal.) Coolant flow/min. 60 Hz - lit. (US gal.) Heat rejection to coolant BTU/hr. Inlet air 60 Hz - m³/min.(cfm) Max. operating air temp onto radiator* °F Max. operating ambient temp* °F Max. external pressure drop on radiator in. H <sub>2</sub> O	23.7 (6.3) 12.3 (3.3) 11.4 (3.0) 148 (39.2) 218,000 159 (5600) 140 120			
COMBUSTION AIR REQUIREMENTS Flow at rated power 60 Hz - m³/min.(cfm)		5.2 (	185)	
EXHAUST  Exhaust flow at rated output 60 Hz—m³/min.(cfm)  Max recommended back pressure Kpa(Hg)  Exhaust temp at rated output °C (°F)  Exhaust outlet size (2) mm (in.)	19 (679.5) 10 (2.9) 565 (1050) 64 (2.5)			
ENGINE Rated RPM 60 Hz HP at rated KW 60 Hz Piston speed 60 Hz - m/sec. (ft./min.) BMEP 60 Hz - psi	1800 107 6.3 (1250) 113.1			
DERATION FACTORS  Temperalure  5% for every 10°C above - °C  2.77% for every 10°F above - °F  Altitude  1.1% for every 100 m above - m  3.5% for every 1000 ft. above - ft.	25 104 106 350	7	1	25 04 067 500

<sup>\*</sup> Note: Values given are maximum temperatures to which power adjustments can be applied. Consult your Generac Power Systems representative if operating conditions exceed these maximums.

- 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
- Battery 12 Volt 90 AH
- Stainless Steel Flexible Exhaust Connection
- Battery Charge Alternator
- Battery Cables
- Composite Battery Box
- Vibration Isolation of Unit to Mounting Base
- 12 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
- 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.

- "H" Control Console Digital Controller
  - · Communication Software for Remote Access
  - · Digital Reading AC Volts
  - Digital Reading AC Amps
  - Digital Frequency
  - · Emergency Stop Button
  - · Audible Alarm
  - Programmable Engine Control (See Bulletin #0172110SBY For Details)
- 20 Light Annunciator Generator Alarms
- 8 Form C Dry Contact Output Relays
- 120 Volt Coolant Heater 1500 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
- Five Year Extended Warranty
- Enclosure Options
  - · Open Generator Set w/ Duct Adapter
  - Weather Protective Level III Sound Attenuated Enclosure w/ Enclosed Critical Grade Muffler and Flex Exhaust
- 12V Dual-Rate 10 Amp Battery Charger With 120V 3 Wire Connection Cord





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

262/544-4811 · FAX 262/544-4851

# Site Search Summary Bayview Facility Milford, 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 Bayview section of the City of Milford 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 four (4) telecommunications facilities within approximately three (3) miles of the proposed Bayview Facility. None of these existing facilities, however, can provide the service needed in the identified problem areas, along portions of Route 162 and local roads, as well as commercial and residential land uses in the Bayview area. (See <u>Attachment 7</u>).

# **Existing Telecommunication Facilities**

	(Cellco Site Name)	Facility <u>Height and Type</u>	<b>Location</b>	Cellco Antenna Height
1.	Milford South	70° (Smokestack)	200 High Street Milford, CT	67'
2.	Forest Heights	87.5' (Roof-Top Flagpole)	1052 Boston Post Road Milford, CT	76.5' and 82.5'
3.	Old Gate	120' (Tower)	311 Old Gate Lane Milford, CT	100'
4.	Milford South 2	185' (Tower)	185 Research Drive Milford, CT	126'

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 requirements. 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 Bayview Search Area

The purpose of the proposed Bayview Facility is to provide reliable PCS, cellular and LTE service to significant gaps that have been identified along portions of Route 162 and local roads, as well as commercial and residential areas, in the Bayview area. 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.

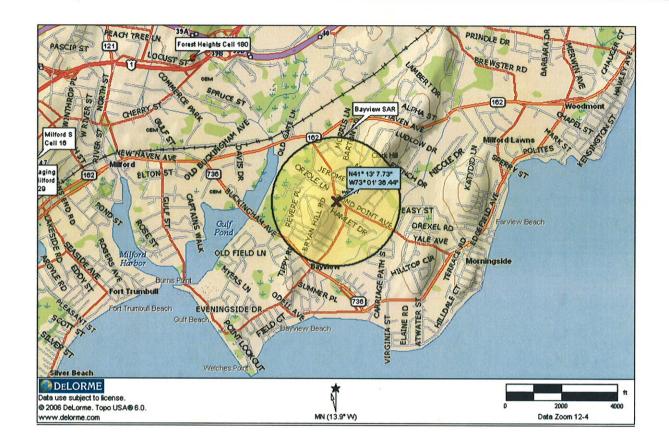
Cellco issued its Bayview search area in September of 2006. (See attached Search Area Map). As a matter of practice, Cellco's initial site search effort focuses on municipal or other quasi-public properties that might be available and appropriate locations for a telecommunications facility. If no public properties are available, Cellco investigates private land within or near the designated search area.

# Sites Investigated in the Bayview Area

The Bayview section of Milford presents several obvious challenges when searching for a telecommunications facility location. The predominant land use in the area is a mix of small lot single-family and multi-family residential. Small commercial uses, neighborhood recreation areas and an assisted living facility are also found on and in the immediate vicinity of the 234 Melba Street parcel ("Property").

Cellco explored the use of the existing 135-foot T-Mobile flagpole tower on the Property. This tower is currently shared by AT&T, with antennas at the 90 and 100-foot levels; T-Mobile with antennas at the 110 and 120-foot levels; and Sprint antennas at the 130-foot level. The existing T-Mobile flagpole tower is not structurally capable of supporting additional antennas on the existing structure, below the AT&T antennas. Likewise, the existing tower cannot be expanded to accommodate Cellco's antennas above the Sprint antennas. Construction of a new flagpole tower, capable of supporting AT&T, T-Mobile, Sprint and Cellco antennas would need to be at least 165 feet tall (AT&T antennas at the 90 and 100-foot levels; T-Mobile antennas at the 110 and 120-foot levels; Sprint antennas at the 130-foot level; and Cellco antennas at the 140, 150 and 160-foot levels).

Rather than pursue a significantly taller flagpole tower structure in this predominantly residential area, Cellco decided to pursue the development of a second flagpole tower, at a height comparable to the existing T-Mobile flagpole tower. The development of a second flagpole tower would result in minimal additional visual impact on the Bayview area, and less overall visual impact than a 165-foot tall flagpole tower. A similar approach at Cellco's Round Hill facility successfully reduced the overall visual impact of the telecommunications facility in the predominantly residential areas of north Greenwich.



### **BAYVIEW SAR**