



GNC 420, GPS/COMM with color moving map

The GNC 420 and GPS 400 are impressive additions to the line up of WAAS upgradeable panel mount avionics from Garmin. As logical derivatives of the revolutionary GNS 430, the GNC 420 and GPS 400 deliver the precision, reliability and design integrity you've come to expect from Garmin.

Both units feature easy-to-use and easy-to-read, user-configurable displays that simplify access to massive amounts of pilot-specific data. You can monitor your flight plan by watching onscreen text and graphics. And you can experience the finest in situational awareness from the color moving map with Jeppesen® flight data overlaid on a detailed built-in sectional-like basemap that shows cities, highways, railroads, rivers, lakes and coastlines. The 400-series avionics also include FDE (Fault Detection



GPS 400 GPS with color moving map

and Exclusion) software, a requirement for Oceanic Approval. The "A" version of the GNC 420 offers the power and performance of a 16-watt comm.

Whether you need a full-featured GPS with color moving map or a GPS/comm with color moving map to round out your panel, look to Garmin for a perfect fit.

GNC 420 and GPS 400 common specifications

Jeppesen database

Coverage:	Americas, international or worldwide
Airports:	Identifier, city/state, country, facility name, lat/long, elevation, fuel service, control, approach information
VORs:	Identifier, city/state, country, facility name, lat/long, frequency, co-located DME/TACAN, magnetic variation, weather broadcast
NDBs:	Identifier, city/state, country, facility name, lat/long, frequency, weather broadcast
Intersections:	Identifier, country, lat/long, nearest VOR
Frequencies:	Approach, arrival, control area, departure, Class B, Class C, TMA, TRSA—with sector, altitude and text usage info; also, ASOS, ATIS, AWOS, center, clearance delivery, ground, pre-taxi, tower, unicom, localizer and ILS
Runways:	Designation, length, width, surface, lighting, pilot-controlled lighting freq.
FSS:	Identifier, reference VOR, freq. usage
ARTCC:	Identifier, freq. usage
MSA:	Minimum safe altitude along and in proximity to active flight plan
Approaches:	Non-precision and precision approaches throughout the database coverage

SIDs/STARs:	Contains all SIDs and STARs
Airspaces:	Class B and C with sectors, International CTA and TMA with sectors; all special-use airspace, including MOA's, prohibited and restricted areas—with controlling agency and airport

Safety features	
Emergency search:	9 nearest airports, VORs, NDBs, intersections, or user waypoints; 5 nearest FSS and ARTCC freq.
Alarms:	Arrival; timers; airspace alarms at 10 minutes, 2nm and inside airspace

User customization	
Waypoints:	1000 user-defined
Flight plans:	20 reversible; up to 31 waypoints each

GPS performance	
Receiver:	PhaseTrac12™ twelve parallel channel receiver, simultaneously tracks and uses up to 12 satellites
Acquisition time:	12 seconds (warm), 45 seconds (cold)
Update rate:	Once per second, continuous
Accuracy:	Position—15 meters (49 feet) RMS* Velocity—0.1 knot RMS steady state

GNC 420 and GPS 400 common specifications

Dynamics:	Velocity (max)—999 knots Acceleration (max)—6 g
Nav features:	Pilot-defined course selection and waypoint hold, closest point of approach, departure and arrival frequencies, approach navigation using published approach procedures stored on NavData card, terminal navigation using SIDs/STARs from NavData card
Planning features:	True airspeed, density altitude, winds aloft, RAIM availability, sunrise/sunset times, trip and fuel planning, vertical navigation (VNAV)
Interfaces:	ARINC 429, Aviation RS-232, CDI/HSI, RMI (digital: clock/data); superflag out, altitude (serial: Icarus, Shadin-Rosetta, encoded Gillham/Greycode), fuel sensor, fuel/air data, BFG WX 500 StormScope™, BFG SKY 497 SkyWatch™ and Ryan 9900B TCAD
Map datums:	124, plus one user-defined
Frequency display:	Upper left corner of active matrix LCD, 2-lines with active frequency above standby

Physical specifications

Unit size:	Width = 6.25" Height = 2.65" Depth = 11.00" behind panel, with connectors
Unit weight:	4.9 pounds installed (400) 5.8 pounds installed (420)
Display:	Color LCD
Power:	11-33 VDC; 28 VDC (420 "A")
Data storage:	Separate internal battery protects stored data for up to five years

Environmental

Temperature:	-20°C to +55°C (operating range) -20°C to +70°C (short-term operation)
Humidity:	95% non-condensing
Altitude range:	-1,500 ft to 50,000 ft

Components

Standard package:	GNC 420 or GPS 400 and a NavData™ card GPS antenna Installation rack and connectors Pilot's guide Quick reference guide Database subscription packet
Options:	User data card

Certifications

GPS:	TSO C129a, Class A1 (en route, terminal and approach)
Oceanic Approval:	Fault Detection and Exclusion (FDE)

GNC 420 unique specifications

VHF COM performance

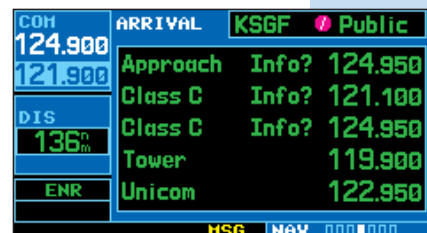
Frequency display:	Upper left corner of active matrix LCD, 2-lines with active frequency above standby
Channels:	760 (25 kHz spacing); configuration for 3040 channels (8.33 kHz spacing) also provided
Frequency range:	118.000 MHz to 136.975 MHz
Transmit power:	10 watts minimum; 16 watts minimum (420 "A")
Modulation:	70%
Receive sensitivity:	2.0 µV for 6 dB S/N with 1 kHz 30% mod.

Squelch sensitivity: 2.0 µV typical

Audio output: 100 mW minimum into a 500 ohm load; external amplifier required to drive cockpit speaker

Additional certifications

VHF COM: TSO C37d, Class 4 and 6 (transmit), TSO C37d, Class 3 and 5 (transmit)- 420 "A" and TSO C38d, Class C and E (receive)



NAVCOM page



Default NAV page



Runway diagram page

©2003 Garmin Ltd. or its subsidiaries



Garmin International, Inc.
1200 East 151st Street
Olathe, Kansas 66062, U.S.A.
913/397.8200 fax 913/397.8282

Garmin (Europe) Ltd.
Unit 5, The Quadrangle,
Abbey Park Industrial Estate,
Romsey, SO51 9DL, U.K.
44/1794.519944 fax 44/1794.519222

Garmin Corporation
No. 68, Jangshu 2nd Rd.
Shijr, Taipei County, Taiwan
886/2.2642.9199 fax 886/2.2642.9099

www.garmin.com

Specifications are subject to change without notice.