



16 watt comm
available on the
GNS 430 "A"

The Garmin GNS 430 has become known as the "one box." Because while many avionics components offer some of the capabilities of the GNS 430, it's the integration of so many different capabilities into a single unit that makes the GNS 430 unique. It's a comm/nav/GPS with brilliant color map graphics all rolled into one.

The GNS 430 continues in the Garmin tradition of easy operating software. Logic prevails to make sense of massive amounts of pilot-specific data. To access this information you merely need to master two concentric knobs and a series of function buttons. All backlit. All right where you'd want them.

The most striking thing about the GNS 430 is how easy

it is to read and interpret. At the heart of the on-screen data is a user-configurable color map. Of course, you can monitor your flight plan using navigation chart graphics. But you can also enjoy the greatest in situational awareness with a detailed cartography database that shows airports, cities, political boundaries, highways, railroads, rivers, lakes and coastlines.

At the heart of the unit is a WAAS upgradeable, 12-channel GPS receiver with a 10-watt comm. The GNS 430 "A" offers 16-watt comm transmitting power for enhanced performance for high altitude aircraft. All 400-series units offer Fault Detection and Exclusion (FDE) software for Oceanic Approval.

No matter what your performance requirements,

GNS 430 specifications

Jeppesen database

Coverage:	Americas or International
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 pilot-nav SIDs and STARs

Airspaces:	Class B and C with sectors, International CTA and TMA with sectors; all special-use airspace, including MOAs, prohibited and restricted areas—with controlling agency and airport
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Safety features

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

User customization

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

Certifications

GPS:	TSO C129a, Class A1 (en route, terminal and approach)
VOR:	TSO C40c
LOC:	TSO C36e
GS:	TSO C34e
VHF COM:	TSO C37d, Class 4 and 6 (transmit) and TSO C38d, Class C and E (receive)

GNS 430 specifications

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*, 1-5 meters with differential corrections; velocity—0.1 knot RMS steady state

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™, Ryan 9900B TCAD and GDL 49

Map datums: 124, plus one user-defined

VOR performance

Frequency range: 108.00 MHz to 117.95 MHz

VOR/LOC composite: 0.50 Vrms/0.35 Vrms

CDI output: ±150 mV full scale

Centering accuracy: ±2.0°

Flag sensitivity: -103.5 dBm

DME channeling: King serial, 2x5, BCD, Slip, Narco 890/891

Audio sensitivity: -103.5 dBm for 6 dB S/N with 1 kHz 30% mod.

Audio output: 100 mW minimum into 500 ohm load; external amplifier required

GS performance

Frequency range: 329.15 MHz to 335.00 MHz

CDI output: ±150 mV full scale

Centering accuracy: 0 ddm ± .0091 ddm

LOC performance

Frequency range: 108.10 MHz to 111.95 MHz

CDI output: ±150 mV full scale

Accuracy: < 4.5 mV

Flag sensitivity: -103.5 dBm

Audio sensitivity: -103.5 dBm for 6 dB S/N with 1 kHz 30% mod.

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

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: 16 watts minimum (GNS 430A)
10 watts minimum (GNS 430)

Modulation: 70% minimum

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

Physical specifications

Unit size: Width = 6.25"
Height = 2.65"
Depth = 11.00" behind panel, with connectors

Unit weight: 6.6 pounds installed

Display: Color LCD

Power: 11–33 VDC

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: GNS 430 and NavData card
GPS antenna
Installation rack and connectors
Pilot's guide
Quick reference guide
Database subscription packet

Options: User data card



Map page



Default NAV page



NAVCOM page

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Specifications are subject to change without notice.