



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

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|-----------------------|---|
| 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 |

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| 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

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| 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

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

Certifications

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|-----------------|---|
| 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

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|---------------------------|---|
| 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

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| 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

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| Frequency range: | 329.15 MHz to 335.00 MHz |
| CDI output: | ±150 mV full scale |
| Centering accuracy: | 0 ddm ± .0091 ddm |

LOC performance

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|---------------------------|---|
| 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

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| 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) |

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| 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

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| 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

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| 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

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| 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.