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Touchscreen Flight Displays for General Aviation Aircraft

- Bright, crisp 10.6" and 7" LCD touchscreen displays offer industry-leading scalability and flexibility in a wide range of panel configurations
- Engine indication system (EIS) optionally available on 7" displays or 10.6" display with split-screen data strip
- HSI mapping enhances situational awareness with MFD-like geographical map detail, weather, traffic display and more — overlaid within HSI portion of the primary flight display (PFD)
- Interfaces with popular avionics and autopilots, offering full touchscreen system continuity with our GTN™ and GTN Xi series[1]
- Full compatibility with original G500 system sensors for a simplified, cost-effective upgrade path

It's a clean-sheet touchscreen design — one that builds on the proven capabilities of our original G500 glass flight display series to offer you a vastly expanded array of features, options and panel layout possibilities. Backed by our No. 1-ranked product support team, the next-generation G500 TXi lineup makes it easy to configure a reliable glass cockpit system that can grow with your needs without overstretching your budget.

Going with Glass Just Got Easier

Designed specifically for FAR Part 23 Class 1/Class 2 aircraft (singles and twins weighing less than 6,000 lbs), G500 TXi glass touchscreens integrate with the GTN Xi touchscreen GPS/Nav/Comm series[1] to provide a fully certified glass suite solution. Reliable attitude/heading reference system(s) (AHRS) replaces the old-style, maintenance-prone mechanical gyros in your system. Available in 7" portrait or landscape orientations — and in a larger 10.6" horizontal format — the G500 TXi displays offer a variety of configurations to fit your panel and budget. In a single 10.6" installation, the display accommodates primary flight (PFD) and a multifunction (MFD) capabilities on the same unit. Optional engine, fuel and electrical readouts (EIS) can also be viewed in a vertical strip alongside the PFD/MFD. A second 10.6" display can be split 80/20 to accommodate MFD and EIS functions, allowing the PFD to show full-screen flight data. The 7" portrait format can act as a dedicated PFD (with HSI map), MFD or EIS — or as a split-screen MFD/EIS display[2]. And the 7" landscape format can be configured to provide dedicated, PFD information, EIS or split-screen MFD/EIS[2].

Flexible Configuration Options

In configuring your system, you can mix and match up to four of the high-resolution touchscreen displays in your cockpit. Or you can start with a single 7" display serving as your PFD, and expand the system's capabilities by adding additional G500 TXi displays. The variety of G500 TXi screen sizes and display orientations can support a multitude of approved cockpit configurations. And each display offers the capability to have a built-in AHRS along with an air data computer (ADC) module integrated on the back of the display unit. As an additional option for remote mounting, a combined air data and attitude heading reference system (ADAHRS) is available, or AHRS and ADC units are available separately. For aircraft already equipped with the original G500 series flight displays, full TXi compatibility with existing system sensors makes for an easy, cost-effective upgrade path.

Stand-alone or Integrated Engine Indications

Whether it's integrated in a split-screen view on the 10.6"
display or shown on a 7" display, engine and fuel monitoring
data is easy to access and interpret with G500 TXi. The
optional engine indication system is compatible with most
popular Lycoming or Continental 4- to 6-cylinder engines
(whether normally aspirated or turbocharged) and can
provide support for both single- and twin-engine aircraft.
Prominent engine gauges on the display provide real-time
indications and support for lean assist mode, pilot advisories,
fuel quantities and more — enabling you to optimize fuel
economy while maintaining high efficiency and performance
from your engine(s). Better still, EIS data is automatically
logged to an SD™ card and, with Connext® cockpit
connectivity, is wirelessly transmitted to the Garmin Pilot™
app[1]. This data can then be exported and analyzed by your
service team.

Brighter, Faster, Easier, Better

Garmin built the TXi series from the ground up by leveraging the experience gained in designing and fielding
thousands of integrated flight displays. The TXi series features an intuitive menu interface that lets you use
familiar knobs and/or touchscreen inputs to quickly access the functions, screen views and other flight
information you want to see. Powerful dual-core processors boost the system's graphical display capabilities
— with faster zooming, panning and map rendering. Optional Garmin SVT™ synthetic vision technology
enables a 3-D virtual reality landscape to be integrated on the G500 TXi flight display. Plus, modernized fonts
and backlighting offer improved readability and increased display clarity to help lighten your in-flight visual
workload.

HSI Mapping Takes Center Stage

To provide even more situational awareness, G500 TXi includes HSI mapping capabilities on the 7" portrait
and 10.6" display configurations, which put an MFD-like perspective map view within the HSI portion of your
PFD. In addition to the geographical map, the HSI map view can also support the overlay of NEXRAD imagery
and weather inputs from ADS-B and SiriusXM® datalinks. Additional overlays include SafeTaxi® airport
diagrams, traffic, terrain and more. HSI map control and on-screen navigation are a snap, thanks to a Garmin
innovation that lets you zoom in or out on the map, using a simple and natural single-finger swipe gesture.

High-level Avionics Integration

G500 TXi was designed to interface with a wide
range of avionics equipment, including our digital
GFC™ 600 series, GFC 500 (requires G5 as standby
instrument) and other popular autopilots installed in
Class 1 and Class 2 aircraft. You can use the G500
TXi touchscreens for control/display of heading,
course and navigation source inputs as well as
autopilot mode annunciations and more (with
compatible inputs). Plus, G500 TXi allows automatic
GPS-to-LOC switching when paired with the GTN
750Xi/GTN 650Xi series navigators, which allow the
GFC 500 autopilot to fly complete ILS approaches. As
an option, separate dedicated PFD controllers are
also available in five different control layouts for
continuity with the specific autopilot system
installed in the aircraft. G500 TXi also offers
advanced integration capability with GTN series
navigators, providing full touchscreen continuity
between the navigation, communication and flight
display functions in your panel.

Redundancy Adds Assurance

For extra peace of mind in systems where multiple displays are installed, G500 TXi is designed to enter a reversionary mode — allowing a single 7" portrait or 10.6" display to present primary flight instrumentation and engine indications (if EIS equipped) — in the unlikely event of another display failing or shutting down. The displays have backup GPS receivers built-in as well, providing redundancy in the event your system's primary GPS navigator ever fails.

Connext Cockpit Connectivity

For even more ease-of-use functionality, team your G500 TXi displays with a GTN 650 or GTN 750 or GTN 650Xi or GTN 750Xi series navigator and our Flight Stream 510 wireless gateway[1]. This setup enables our Connext wireless cockpit connectivity, which lets you stream information in real time between your avionics and compatible mobile devices running the Garmin Pilot, ForeFlight mobile or FltPlan Go apps. This turns your tablet or smartphone into a true cockpit interface. You can use your mobile device to create flight plans whenever and wherever it's convenient, and then easily transfer the data to your avionics once you get to the airport. You can also wirelessly stream weather, traffic, attitude information and more from your avionics to your compatible device[4]. Plus, by using Database Concierge via Flight Stream 510, you can wirelessly transfer aviation databases downloaded to the Garmin Pilot app on your mobile device to your GTN 650/750 or GTN 650Xi/750Xi and G500 TXi system. For aircraft without a GTN navigator, Flight Stream 510 can also be paired directly with a TXi display to provide flight data to Garmin Pilot — and/or provide EIS data, when EIS TXi is installed.

Add Standby, Weather, Traffic and Other Options

Pairing G500 TXi with a GI 275 electronic flight instrument adds standby attitude indicator capabilities to your panel. The displays even synchronize heading and airspeed bugs for easy transition to the standby instrument. G500 TXi seamlessly integrates with a variety of optional sensors and datalinks to support the latest weather and traffic monitoring capabilities. Our Doppler-capable GWX™ 75 onboard color radar features a reliable, solid-state design as well as optional turbulence detection and ground clutter suppression capabilities. For pilots flying in the U.S., our GTX™ 345 series all-in-one ADS-B transponders provide easy access to subscription-free ADS-B weather and advanced dual-link traffic services. Plus, by installing a GDL® 69A satellite receiver with your system, you can add ground-and-airborne-accessible SiriusXM satellite weather and audio entertainment channels to the mix (subscriptions required). For a worldwide datalink solution, our GSR 56 datalink provides weather data and radar imagery through the Iridium® global satellite network. And for even more advanced traffic surveillance in high-density airspace, G500 TXi integrates with select TAS or TCAS systems, including our GTS™ family of traffic surveillance products. Additionally, TXi also supports multiple video input options that enable the MFD to serve as a live-cam video monitor.

It Remembers Your Likes and Preferences

Don't you hate it when another pilot starts twiddling with your avionics settings — and neglects to put them back the way you left them? With G500 TXi, those worries are over. Your custom pilot profile settings can be saved[4] within the system or loaded onto a removable SD card — which means you can also take your settings with you to another G500 TXi-equipped aircraft. Pilots operating within a flying club or flight school will especially appreciate this feature. Your preferred settings for backlighting, map settings and more can all be configured under your individual profile — allowing you to easily restore your system preferences prior to each flight.

Learn More About G500 TXi

With installation approval available for hundreds of aircraft models, retrofitting your cockpit with G500 TXi is a straightforward, all-bases-covered proposition. You can select from a wide range of display formats. And no matter which configuration you choose, you'll be flying with the peace of mind that comes with an industry-leading 2-year warranty, backed by our award-winning product support team. See your authorized Garmin installation center to get on board with a G500 TXi upgrade for your aircraft.