

ADS-B input<sup>1</sup> enables subscriptionfree weather and advanced traffic features like TargetTrend<sup>11</sup> relative motion.





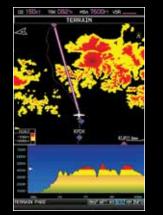
SVX uses yellow or red highlights to indicate potential terrain conflicts



Optional XM WX<sup>™</sup> satellite weather can overlay on the G3X moving map<sup>2</sup>



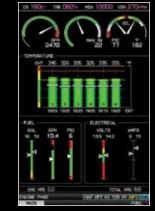
SVX shows runway surfaces, numbers and thresholds in virtual 3-D



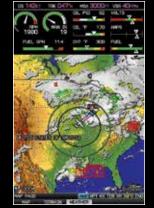
Color-keyed terrain page on G3X offers overhead and vertical profile views



Optional SiriusXM<sup>®</sup> Radio lets you enjoy 170+ channels of audio entertainment<sup>2</sup>



Detailed Engine Indication System (EIS) readouts can be viewed by selecting the ENG page



How far can you go? Graphical range rings are based on real-time fuel flow calculations



IFR map mode displays Victor airways and Jet routes, derived from navigation database



Garmin SafeTaxi<sup>®</sup> diagrams are included as standard and are available for the U.S., Europe and Canada



Garmin FliteCharts® come standard<sup>3</sup>. Users can pan and zoom to focus on specific details





ADS-B datalink receiver sold separately \*XM subscription required (sold separately) \*Updates available on single-cycle or annual basis. FliteCharts will disable when the data is over 6 months out-of-date.

Garmin International, Inc. 1200 East 151st Street Olathe, KS 66062 p: 913.397.8200 f: 913.397.8282 Garmin (Europe) Ltd. Liberty House, Hounsdown Business Park Southampton, Hampshire, SO40 9RB, U.K. p: 44.1794.519944 f: 44.1794.519222 Garmin Singapore Pte. Ltd. 46 East Coast Road #05-06, Singapore 428766 p:65.63480378 f:65.63480278 e: avionics.asia@garmin.com Electronic flight display system for light sport and experimental aircraft

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#### Fly with Garmin G3X<sup>™</sup>. Starting as low as \$4,375.

Now, all the capabilities you want in a true "glass cockpit" package are brought together in Garmin's G3X<sup>™</sup> Flight Display system for experimental/kitplane and light sport aircraft. This affordable, easy-toinstall suite is modular in design, allowing you to grow your system as your needs and budget dictate. Plus, by adding optional "smart" servo modules, your G3X package can now be upgraded with an all-Garmin digital autopilot interface at a very accessible price.

Featuring bright, easy-to-read, 7-inch WVGA screens, the GDU 370/375 series cockpit display units used in the G3X system come with built-in WAAS GPS receiver and dual redundant power inputs. They can be configured to integrate full primary flight display (PFD) attitude/directional guidance with electronic engine monitoring and detailed moving-map multifunction display (MFD) capabilities. Standard features include Garmin's SVX<sup>™</sup> synthetic vision display with 3-D "pathways" flight route guidance, EIS engine monitoring, ADAHRS reference, and available geo-referencing capability on FlightCharts<sup>®</sup> and SafeTaxi<sup>®</sup> diagrams. The optional G3X autopilot system, developed specifically for the non-certified

#### The basic building blocks of your Garmin G3X<sup>™</sup>system.

#### GDU 370/375 Display Unit

Think "glass cockpit" display with internal GPS. Both the GDU 370 and 375 feature crisp 7-inch WVGA flatscreen displays with dual redundant power inputs. Both provide realistic moving-map graphics for navigation and situational awareness. And both can accommodate not only MFD capability, but flight and engine instruments as well. The primary difference between the GDU 375 and GDU 370 is that support for Sirius XM<sup>™</sup> satellite weather and audio entertainment is provided with the GDU 375 (subscription required)

#### **GSU 25 ADAHRS**

Leveraging sensor technology from Garmin's G1000<sup>®</sup> glass flight deck, this GPS-aided digital ADAHRS (Air Data and Attitude Heading and Reference System) provides highly accurate and reliable referencing of your aircraft position, rate, vector and acceleration data. The complete sensor package takes up just a fraction of the space and weight previously required by conventional gyro-based instrument systems.

market, draws on top-end flight control technology used in thousands of Garmin G1000<sup>®</sup> installations. Offering mode selection through your G3X display's softkeys, or through an optional dedicated control panel, the smooth-flying Garmin autopilot sets a new standard for capability and value in this segment of General Aviation. Better still, Garmin has added an Angle of Attack (AOA) system option that integrates with the G3X flight displays to help you derive even more safety, efficiency, and performance from your aircraft. Other system upgrade options available for the G3X suite include built-in Sirius XM<sup>™</sup> satellite weather and audio entertainment (subscription required). For ADS-B compliance, you can team the G3X system with Garmin's GTX 23 ES transponder, a GDL 39 datalink receiver, and a position source such as the GPS<sup>™</sup> 400 or GTN series navigators. With these components, your system not only meets the FAA's ADS-B "Out" mandate, but it also provides access to such ADS-B "In" benefits as datalink traffic and subscription-free weather. A built-in network interface allows up to three fully reversionary G3X glass displays to be interlinked in your aircraft. So, it's easy to scale a system that perfectly fits your panel, your priorities, and your price range.

#### GEA 24 Engine Indication System (EIS)

This EIS module enables aircraft-specific tailoring of instrumentation inputs for display of engine gauges, color bands, alerts, fuel, flaps, trim and other vital sensor data on the G3X. Sensor kits are available for most popular engine configurations used in experimental and light sport aircraft.

#### GMU 22 Magnetometer Unit

Garmin's GMU 22 tri-axial magnetometer is a remote-mounted device that interfaces with a Garmin GSU 25 ADAHRS to provide flight attitude and heading data for flight instrumentation. Incorporating long-life solidstate sensing technology, the GMU 22 Magnetometer uses magnetic field measurements to create an electronically stabilized AHRS.

#### **GTP 59 Temperature Probe**

The Garmin GTP 59 is an outside air temperature (OAT) probe that provides ambient sensor data to the G3X's air data computer for true airspeed, density altitude, and other essential flight calculations.



The integration and versatility provided by Garmin's G3X electronic flight displays make it easy to customize the ideal panel layout for your aircraft. You can start with a single screen. Or opt for a dual-screen configuration with separate PFD and MFD. Or you can even add a third screen in the copilot position, if desired. The G3X glass displays work like building blocks, allowing you to grow your system to fit your needs and budget. Shown here are just a few examples of what's possible and practical in a G3X installation.

# Garmin G3X<sup>™</sup>system examples and prices.

Here are just a few of the ways Garmin G3X can be configured to fit your panel layout and avionics budget:

# \$4,375\*

Features a single GDU 370 display with GSU 25 ADAHRS, GEA 24 engine indication (EIS), GMU 22 magnetometer and GTP 59 air temperature probe.



# \$6,495\*

Combines dual GDU 370 displays with GSU 25 ADAHRS, GEA 24 engine indication (EIS), GMU 22 magnetometer and GTP 59 air temperature probe.

\$400



### Now, it's easy to add full autopilot capability to your Garmin G3X<sup>™</sup>.

All it takes is the addition of Garmin's affordable GSA 28 "smart" servo units to give your G3X a range of autopilot capabilities similar to those provided by the high-end GFC<sup>™</sup> 700 systems found on thousands of certified aircraft. You have the option of purchasing a one- or two-axis configuration (roll servo only, or pitch+roll), to add the level of capability you want. Even better, the Garmin system includes automatic trim functionality at no additional cost. And for added redundancy, it's the only integrated autopilot in its class to offer standalone operation in the event of EFIS display outage or shutdown.

### Autopilot options for your G3X<sup>™</sup>:

#### GSA 28 servo

Typical autopilot installation includes two (pitch and roll axis) GSA 28 integrated servos, with auto-trim included. \$750\*\* each servo

**Optional GMC 305 control panel** 

Add a separate autopilot control panel for dedicated mode selection as well as access to additional autopilot modes including

Indicated Airspeed Hold (IAS), Level recovery (LVL), and Yaw Damper (YD), and Flight Director (FD).

\$750\*\*

### Supplemental ADAHRS

For enhanced G3X<sup>™</sup> system redundancy, vou can add an extra GSU 25 air data, attitude and heading reference system (ADAHRS) unit. It's also

a compatible upgrade for existing G3X systems which utilize the Garmin GSU 73 ADAHRS module.



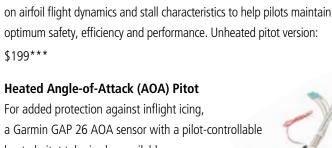
hold, independent flight director, and more. A control wheel integrated into the GMC 305 makes for easier pitch, vertical speed and airspeed adjustments. Plus, for added safety, the panel's advanced LVL mode button commands the autopilot to help restore the aircraft to straightand-level flight. Installation of the system is simple and straightforward, with industry-standard servo mounting kits available – as well as airframespecific versions for the popular Van's RV series (RV-4/6/7/8/9/10 models).

AOA sensors, like the Garmin GAP 26, provide accurate, real-time information

The optional GMC 305 control panel provides a dedicated interface unit

offering access to such advanced autopilot modes as indicated airspeed

### Angle-of-Attack (AOA) Pitot



\$8,495\*

Three-display G3X system featuring

GEA 24 engine indication (EIS),

air temperature probe.

GDU 370 PFD/MFD, GSU 25 ADAHRS,

GMU 22 magnetometer and GTP 59

heated pitot tube is also available: \$299\*\*\*

### Heated with Regulator Angle-of-Attack (AOA) Pitot

To keep the unit ice-free, while efficiently controlling power usage, a Garmin GAP 26 AOA sensor with automatically regulated pitot tube heat is also available:

\$449\*\*\*

\$199\*\*\*

#### \*Reflects manufacturers minimum advertised price or list price.

- \*\*Reflects manufacturers minimum advertised price. Price does not include installation kit, which costs from \$45-\$150, depending on aircraft configuration.
- \*\*\*Reflects manufacturers minimum advertised price. Compatible with existing G3X systems; requires a GSU 25 ADAHRS for interface.

### Additional avionics options to consider:

#### GMA 240 audio panel

Versatile non-TSO'd audio panel designed for experimental and light sport (LSA) aircraft. Includes 4-place stereo intercom and support for 2 stereo music inputs. Multifunction phone/audio mini jack on the front of the unit lets you route cellphone calls or iPod/MP3/XM Radio players right through your aircraft headset – with selectable instant muting when radio transmissions

are received from ATC. \$845\*



#### GTR 200 comm radio

Powerful 10-watt, all-digital VHF comm transceiver provides full 760-channel capability (with 25 kHz spacing) in a compact 1.35" high unit. Features automatic frequency ident (using your G3X database) to verify who you're talking to - plus standby comm monitoring, auto squelch, two-place intercom

with 3-D audio input separation, and much more. \$1,199\*



### GNC 255 nav/comm

Combines a powerful 10-watt VHF comm transceiver with 200-channel VOR/ LOC/GS nav receiver in a fully certified 1.65" high unit. (A 16-watt version is also optionally available – and both versions offer 8.33 kHz frequency spacing for European compliance.) The radio's built-in frequency database lets you look up the frequencies for a given airport (Tower, Ground, ATIS, Clearance Delivery, etc.) just by entering the identifier. Also, automatic ident is provided for any comm frequency you select – so you'll always know who you're talking to. Other highlights include storage and recall of most-used

frequencies, standby frequency monitoring, and more. \$4,495\*



#### GDL 39R ADS-B datalink

This remote mountable, dual-link ADS-B antenna/receiver makes it easy to connect with the FAA's uplink network for subscription-free U.S. weather and traffic information. A non-certified,



receive-only product (ADS-B "In"), the GDL 39R provides both visual and audible traffic alerting, as well as access to NEXRAD imagery, METARs, TAFs, winds and temperatures aloft, PIREPs, NOTAMs, and other weather information. Also displays TargetTrend<sup>™</sup> relative motion traffic and SURF technologies. In addition, this remote antenna/receiver can also provide GPS data to a variety of Bluetooth connected devices. With the GDL 39R, your G3X can support two simultaneous Bluetooth connections to devices such as iPads or Garmin portables.

\$799\*



\$799\*\*



\$2,199\*

## GTN<sup>™</sup> Series 750/650 touchscreen

All-in-one GPS/Nav/Comm solution with touchscreer interface and built-in SBAS/WAAS navigation capabilities. Meets ADS-B "high integrity" position source requirements. And it's approved to fly LPV "glidepath" approaches into thousands of airports without an ILS.

\$16,900\* - GTN 750 • \$11,400\* - GTN 650

#### **GPS 400W WAAS navigation receiver**

Space-saving standalone GPS movingmap navigator provides easy-to interpret color graphics, detailed moving map and

full WAAS approach capability – enabling virtual glidepath guidance into thousands of airports not served by ILS. Can be used to meet ADS-B "high integrity" position source requirements.

\$3,995\* Note: Promotional price with G3X purchase

### GAD 29 nav data adapter

This compact module provides an ARINC 429 data interface between your G3X system and various IFR-capable GPS navigators, such as the Garmin GTN 750/650 series or the legacy

530/430. When paired with these certified GPS receivers, the GAD 29 enables your G3X to incorporate such advanced features as GPS steering, WAAS LPV vertical approach guidance, and more. \$425\*\*

## AeroNav VFR databases

Garmin offers a bundled pricing program for all the essential database and update information used in your G3X<sup>™</sup> system. The bundled database option allows you to purchase annual subscriptions for multiple databases at a reduced price. For example, a U.S. VFR navigation database featuring AeroNav data is available with full FAA Terrain and Obstacle data in a special 1-year subscription combo priced at just:

GTX 23 ES Mode S transponder

Affordable 250-watt digital Mode S transponder offers data link capabilities with Traffic Information Services (TIS-A) interface and auto standby capability. Provides ADS-B "Out" with extended squitter, which can be paired with a WAAS position source for compliance with FAA's NextGen mandate.











# Garmin G3X<sup>™</sup> Specifications

GDU 370/375 Disp	lay Unit	This product holds no TSO certification	GEA 24 Engin	the Indication (EIS) Unit This product holds no TSO certification
Display:	WVGA TFT w	7.78 cm) 480 x 800 pixels, color sunlight readable ith adjustable backlighting. Optional lighting bus	EIS:	Provides accurate digital monitoring of engine and airframe sensors interfaced with the G3X cockpit displays
Floor fool		available for automatic backlight control.	Electrical:	14-28 VDC
Electrical:	10-29 VDC 10 watts typic Dual isolated		Size:	6.50"W x 1.90"H x 3.00" D (16.51 x 4.83 x 7.62 cm)
Size:	6.04″W x 7.8 (15.34 x 19.8	3″H x 3.41″ D 8 x 8.67 cm)	Weight:	GEA 24, 0.71 lb (0.322 kg) Weight does not include nut plate and connector
Weight:	GDU 370, 1.5 GDU 375, 1.6 Weight does		Engine/Airframe	Interfaces: Support is planned for sensors commonly used on Lycoming, Continental, Rotax, and Jabiru engines. Supports Rotax's 912 iS engine.
GPS Receiver:		high-sensitivity GPS receiver with WAAS acy and 5 Hz update rate		Configurability of the GSU allows measurement of many different aircraft parameters including but not limited to:
Interfaces:		ports per display, supporting NMEA 0183, SL 30/40		• Ammeters (2)
	and GTX 330			<ul> <li>Thermocouples (Monitor up to 6 cylinders and 2 turbo inlet temperatures)</li> </ul>
GPS/XM Antennas:		externally mounted options available		Aircraft bus voltages
Navigation Features:	Jeppesen aviation database			Resistive Sensors (Up to 6)
		Built-in worldwide land basemap     Terrain and obstacle databases		Powered Transducers
		harts <sup>®</sup> (will disable when data is		• Frequency Counter Inputs (Up to 4)
	6 months o			• Discrete I/O (4 In / 2 Out)
		port diagrams available for the a and Europe		
	• AOPA/AC-L	I-KWIK Airport Directory	GMU 22 Magi	netometer Unit
			Electrical:	Powered through GSU 25
GSU 25 ADAHRS U	nit	This product holds no TSO certification	Size:	2.10"H x 3.35" in diameter (5.33 x 8.51 cm)
AHRS:	<ul> <li>Provides accurate digital output and referencing of aircraft position, rate, vector and acceleration data</li> <li>Leverages solid-state sensors and sophisticated attitude determination and integrity monitoring algorithms used in Garmin's high-end AHRS units</li> </ul>		Weight:	GMU 22, 0.35 lb (158.8 g) Weight does not include mounting
				hardware and connector
	Capable of in-flight dynamic restarts		GAP 26 Angle-of-Attack (AOA) Pitot	
	<ul> <li>Capable of bank and pi</li> </ul>	maneuvers through a range of 360° in tch.	Electrical:	Unheated versions of the GAP 26 do not require power. Supply voltage for heated pitot is 14 VDC
	Rotation rat	e: Up to 200°/sec	Size:	0.82"W x 16.00"H x 6.12" D
Electrical:	14-28 VDC			(2.08 x 40.64 x 15.54 cm)
Size:	4.00″W x 2.5	0"H x 2.12" D(10.16 x 6.35 x 5.38 cm)	Weight:	Unheated, 0.33 lb (149.7 g) Heated , 0.39 lb (176.9 g)
Weight:	GSU 25, 0.48 lb (0.217 kg) Weight does not include mounting hardware and connector			
Environmental: Aircraft pressure altit	ude range:	-1,400 ft. to 30,000 ft.		
Aircraft vertical speed range:		-20,00 to +20,000 fpm		
Aircraft airspeed range:		0 - 300 kts IAS		
Operating temperature range:				

<b>GSA 28 Autopilot Servo Unit</b> GSA28 is used to drive a flight-control axis (pitch, roll) of the aircraft in order to sta aircraft in pitch, roll, and/or heading.	
Size:	2.5"W x 4.00"H x 3.00" D (6.35 x 10.16 x 7.62 cm)
Neight:	1.42 lb (644.1g)

60 inch-lbs (maximum rated)

Torque:

Elect Size

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GMC 305 Autopilot Control Panel		
Electrical:	14-28 VDC	
Size:	6.25"W x 1.85"H x 3.30" D (15.88 x .4.7 x 8.38 cm)	
Weight:	0.5 lb (226.8 g)	
GTR 200 Comm Radio		

K 200 Comm Rad	
trical:	14-28 VDC
	1.35"H x 6.25"W x 7.98"D (3.43 x 15.88 x 20.2692 cm)
ight:	1.34 lbs (0.61 kg) unit only;
	1.91 lbs (0.87 kg) with mounting rack
oth:	9.39 inches (23.85 cm) behind panel, including
	mounting rack and connectors
ironmental:	Operating temperature range: -20°C to +55°C
	Humidity: 95% non-condensing
	Aircraft pressure altitude range: -1,500 ft. to 55,000 ft.

GNC 255 Nav/Comm Radio	
Electrical:	14-28 VDC (Accepts 9 to 33 VDC input)
Size:	1.65"H x 5.25"W x 10.4"D (4.19 x 15.88 x 26.42 cm)
Weight:	3.02 lbs (1.37 kg) unit only; 3.46 lbs (1.57 kg) with mounting rack
	1.91 lbs (0.87 kg) with mounting rack
Depth:	11.23 inches (28.52 cm) behind panel, including
	mounting rack and connectors

#### GDL 39R

oilize the

Size:	1.6"H x 5.0"W x 6.2"D (4.135 x 12.7 x 15.67 cm)
Weight:	0.92 lb (0.417 kg)

## **G3X** Accessories Free single database update (includes one update for navigation, FliteCharts<sup>®</sup>, SafeTaxi<sup>®</sup>, obstacles and towers), Standard:

	Quick reference guide
Optional:	GA 26 In-cabin GPS antenna GA 26X In-cabin XM antenna
	GA 57X External XM/GPS combo antenna GA 56 External GPS antenna
	GA 55 External XM antenna

