



GARMIN®

Thinus Nel

avionics.asia@garmin.com

Australia +61 2 9679 3434

Singapore +65 6 348 0378



GARMIN®



Who is Garmin?



GPS 100



GPS 155 XL



GNS 430



GNS 480



GNS 400/500W Series



GNS 400/500W TSO Authorisation

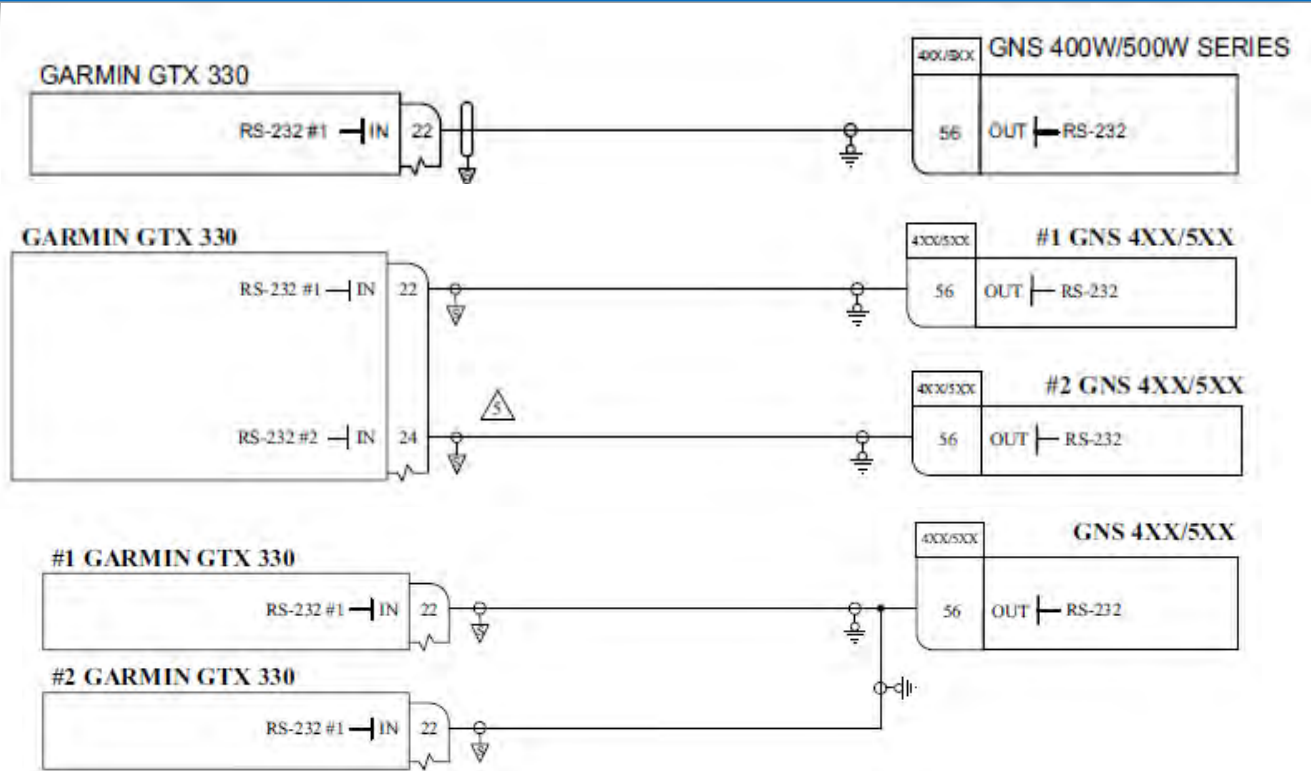
GPS 400W	GPS 420W	GPS 420AW	GNS 430W	GNS 430AW	Function	TSO	Category	Software Part Number
			•	•	ILS Glideslope	TSO-C34e ETSO-2C34f RTCA/DO-192 EUROCAE ED-47B		Included in unit level part number
			•	•	ILS Localizer	TSO-C36e ETSO-2C36f RTCA/DO-195 EUROCAE ED-46B		Included in unit level part number
	•		•		VHF COM Transmitter	TSO-C37d ETSO-2C37e RTCA/DO-186A EUROCAE ED-23B	Class 4 and 6 100nm	Included in unit level part number
		•	•	Class 3 and 5 200nm				
	•	•	•	•	VHF COM Receiver	TSO-C38d ETSO-2C38e RTCA/DO-186A EUROCAE ED-23B	Class C and E	Included in unit level part number
			•	•	VOR Receiver	TSO-C40c ETSO-2C40c RTCA/DO-196 EUROCAE ED-22B		Included in unit level part number
•	•	•	•	•	Multipurpose Display	TSO-C113 ETSO-C113 SAE AS 8034		006-B0448-02 thru -0() or 006-B1144-1() thru -2()
•	•	•	•	•	GPS/WAAS	TSO-C146a ETSO-C146 RTCA/DO-229C	Class 3	006-B0408-04 thru -0() or 006-B0408-2() 006-B0448-02 thru -0() or 006-B1144-1() thru -2()
•	•	•	•	•	HTAWS [1]	TSO-C194 RTCA/DO-309 Non-ETSO Function		006-B1144-2()

GNS 400/500W ADS-B Source



- **GPS SW ver 5.00**
- **GTX 330 w/ES SW ver 7.04**

GNS W/ GTX 330 w/ES RS-232 Interface



CHANNEL OUTPUTS

Selection	Description
Off	No unit(s) connected to output of this channel
ADS-B OUT [4]	Serial communication to Garmin GTX 33/330ES or 33D/330DES Transponders (not AC 20-165 compliant).
ADS-B OUT+ [5]	Serial communication to a Garmin GTX 33/330ES or 33D/330DES transponders, meeting AC 20-165 as defined in Section 1.6.1.



- **ARINC 743A**
- **SW ver 2.13 Q2/Q3**





GTN 750 vs. GNS 530W
98% More Screen Area

GTN 650 vs. GNS 430W
53% More Screen Area

GTN 6xx Series

GTN 625 635 650

GPS	✓	✓	✓
COM		✓	✓
NAV			✓



GTN 7xx Series



GTN 725

GTN 750

GPS



COM



NAV



GTN Features

- Airways** Standard
- Garmin SafeTaxi** USA and Europe Standard
- Obstacle Database** USA and Europe Standard
- Terrain Alerting** TAWS-A/B (Optional)
- 10-Watt Comm** 16-Watt (Optional)
- Traffic** Via Compatible Traffic Source
- Weather** Iridium Satellite and Weather Radar*
- Remote Transponder** GTX 33/330
- *Remote Audio Panel** Via GMA 35
- *Garmin FliteCharts** Jeppesen ChartView (Optional)



*Indicates a feature for GTN 7XX only

GTN 6XX/7XX ADS-B Interfaces

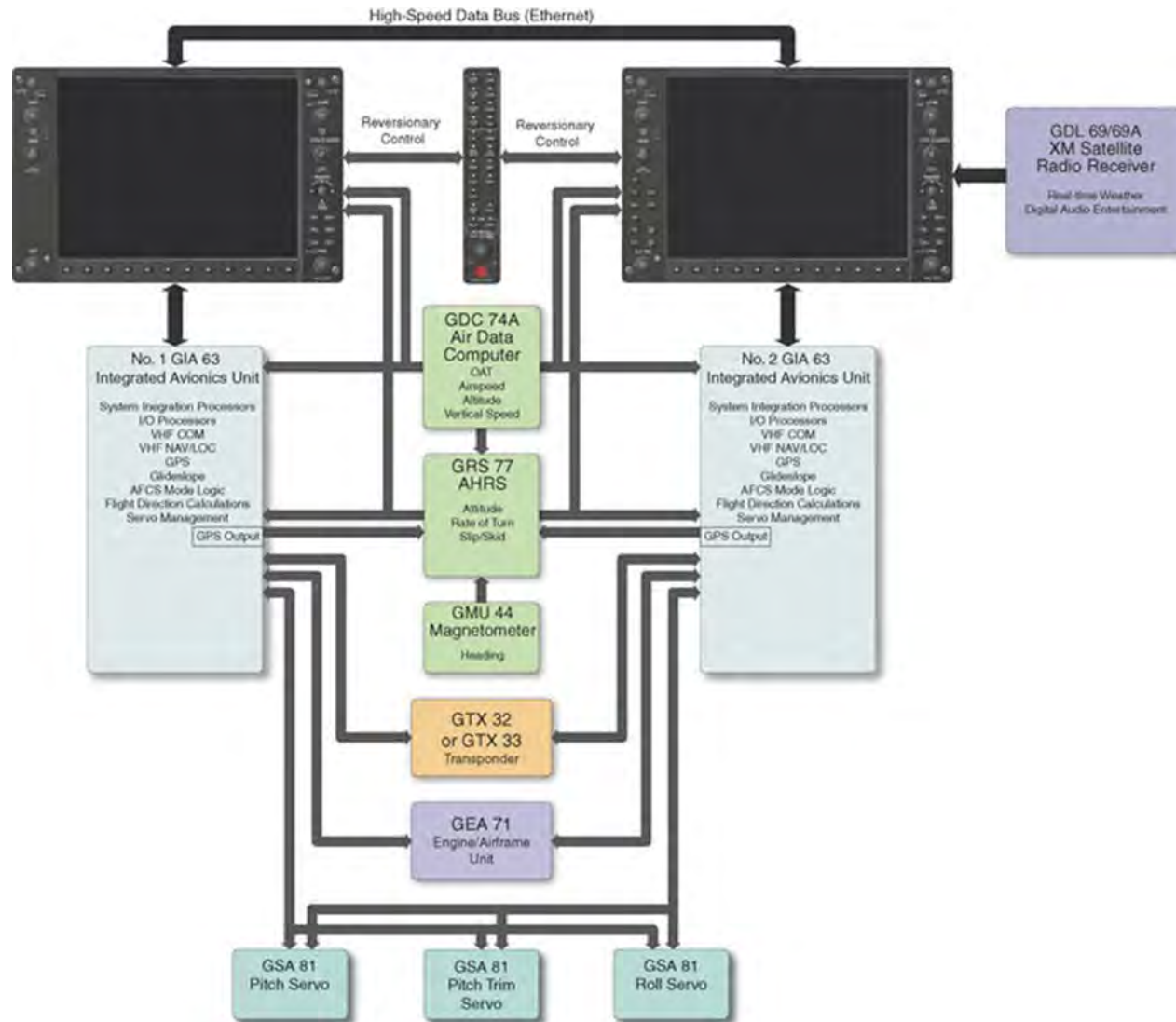


- **RS-232 – GTX 33/330**
- **ARINC 743A SW >5.00**

G1000/G2000/G3000/G5000



G1000 Block Diagram



GIA 63W



Garmin G1000

- Beechcraft** – Bonanza G36, Baron G58, C90 B200 & B350
- Cessna** – C172R&S, 182T&T182T, 206H&T206H, 350,
– 400, C208B, Citation Ten, 510 Mustang, C525
- Socata** – TBM 850,700
- Diamond** – DA 20,40/D/F, DA42 &42NG, DA42L360
- Cirrus** – SR 20, 22
- Embraer** – Phenom 100 & 300
- Piper** – PA 32 & PA46
- Mooney** – M20M/R/TN
- Quest** – Kodiak 100
- Honda** – Honda Jet
- Pilatus** – PC- 6
- Tecnam** – P2006T
- Bell** – 206, 407GX



Garmin G2000



Garmin G3000



Garmin G5000







- **Mode S 1090 MHz**
- **RS-232**
- **ARINC 743A**



- **Mode S 1090 MHz**
- **RS-232**



- **LSA/ Homebuilt G3X**
- **TSO-166b/RTCA DO-260B**
- **GNS W/ GTN**



GTX 3000

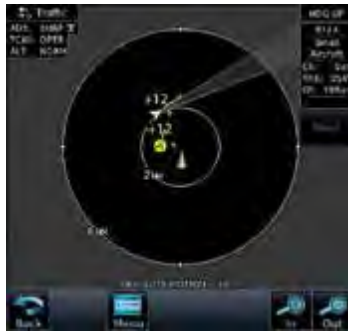


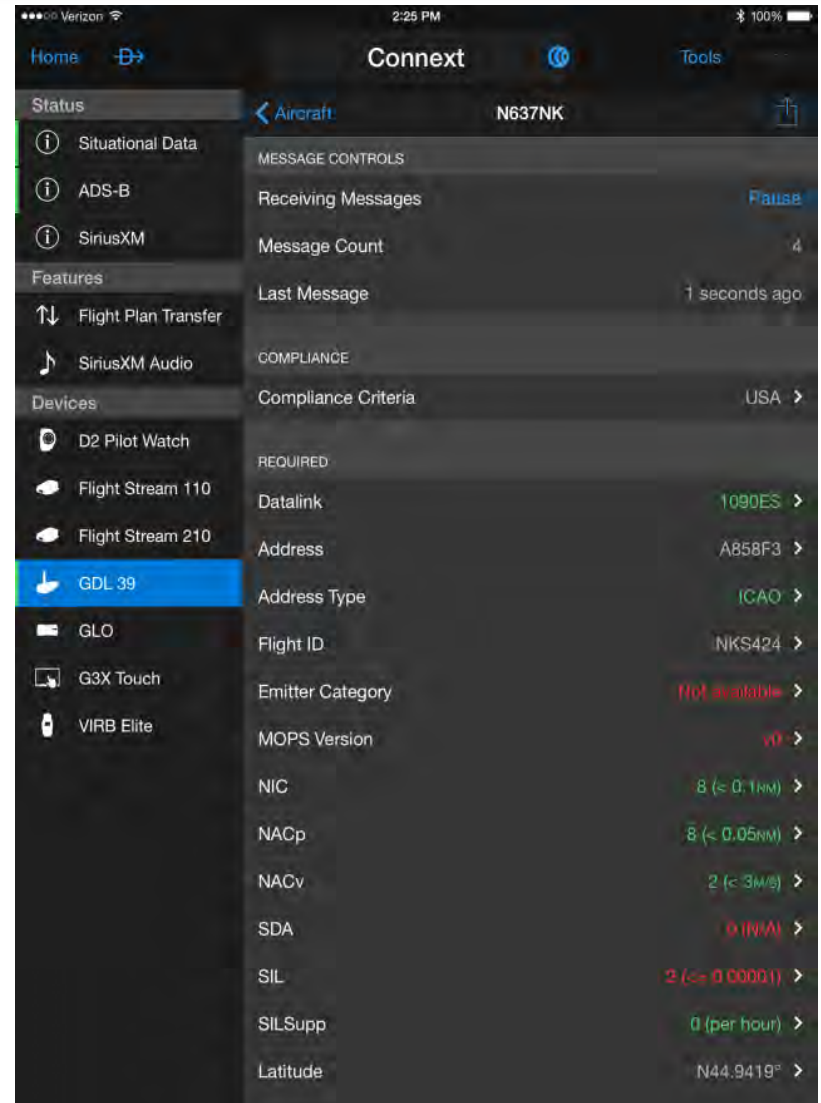
Function	Performance Standard (TSO/ETSO/RTCA/ EUROCAE)	Category	Applicable LRU SW Part Numbers	CLD Part Numbers
Air Traffic Control Radar Beacon System/Mode Select (ATCRBS/MODE S) Airborne Equipment	TSO-C112c ETSO-C112c	Level 2 adens Class 1	006-B0912-0()	006-C0129-1()
Extended Squitter Automatic Dependent Surveillance – Broadcast (ADS-B) and Traffic Information Services – Broadcast (TIS-B) on the Radio Frequency of 1090 MHz	TSO-C166b ETSO-C166b	B1 (diversity)		
RTCA DO-178B Compliance	DO-178B	Level B		
RTCA DO-254 Compliance	DO-254	Level A		

TCAS CONTROLLER [1]	TRANSPONDER CONTROLLER [2]	DISPLAY [1]
Honeywell KFS 578A	Honeywell KFS 578A	Honeywell IVA-81A or IVA-81D
Rockwell Collins CTL-92T	Rockwell Collins CTL-92	Rockwell Collins TVI-920D
Gables Engineering G6992-43	Gables Engineering G6992-43	Rockwell Collins TVI-920D



- 978 UAT
- 1090 MHz ADS-B In
- 1030 MHz





Thank you

