

Choosing a Traffic Advisory System for your G.A. Aircraft



Choosing a Traffic System

TAS - Traffic Advisory System (TAS)

- All TAS systems actively Interrogates threat aircraft transponders for reply
- TAS is not dependent on "third party interrogation"
- TAS provides "real-time" collision alerts
- TAS systems meet FAA TSO C147 specifications

 TAS provides up to a 30-second warning at up to 1200 knot closure -(same as TCAS I)



Avidyne TAS600-Series

Dual antenna system is smallest, lightest, lowest price, best performing.



Garmin GTS8X0

Garmin 820/850 uses an external power amp that adds weight and increases installation costs and requires Garminbranded XPDR.*



L-3 Skywatch 497 & 899

Single Antenna systems. ADS-B upgrade has been announced for SKY899HP/A models.



Honeywell KTA870

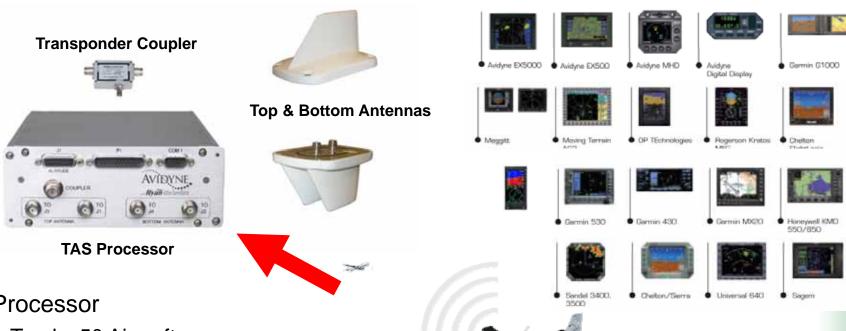
Cost prohibitive for light GA. No upgrade to ADS-B has been announced.



^{*}According to Garmin GTS8XX AML STC Installation Manual 190-00993-05 Rev.3 Oct 2010

TAS600 System Components

Most Traffic Display options



Processor

- Tracks 50 Aircraft
- Smallest & Lightest TAS Processor Available
- Weight 6.8 lbs. and Dimensions 7.25"W x 3.1"H x 9.32"
- Sealed Processor and No External Cooling Required
- Qty. 4 RS-232 Ports to allow multiple display interfaces
- ARINC 429 output for multiple display interfaces

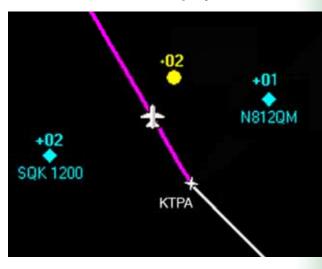




TAS600 System Components

Transponder Coupler Top & Bottom Antennas TAS Processor

Traffic Display



Top & Bottom Antennas

- Patented Directional 4-Element Technology
- •Top and Bottom Antennas "Like the big guys"
- •All Airline TCAS systems have dual antennas
- •Reduces shadowing & improves tracking compared to single antenna systems





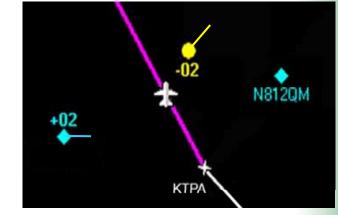
TAS600A Series w/ ADS-B In

Upgrade for TAS600 Active Traffic Systems to accept "ADS-B In"

Provides composite display of ADS-B traffic as well as real-time on-board TAS traffic on currently-compatible displays

- Uses 1090MHz Band
- Meets dual-antenna diversity requirement as defined by DO-260B
- Complements "ADS-B Out" handled by compatible transponder & WAAS GPS
- We are accepting no-obligation reservations now to lock in \$2,000 upgrade cost

at: http://www.avidyne.com/landing/tas600-adsb.asp





Dual-Antenna TAS600 Series (TAS600/605/615/620)

Provides precision and extended range of ADS-B with the added protection of independent active-traffic system.



Traffic System Comparison

	Avidyne	Avidyne	Avidyne	Avidyne	Skywatch®	Skywatch®	Honeywell	Garmin	Garmin	Garmin
	TAS600	TAS605	TAS615	TAS620	497	HP	KTA 870	GTA800	GTA820	GTA850
Suggested List Price	\$8,490	\$10,990	\$14,990	\$20,990	\$15,990	\$20,990	\$24,690	\$9,995	\$19,995	\$23,495
Active Interrogation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Voice Annunciation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Audible Position	Yes	Yes	Yes	Yes	Optional					
Alerting™ or equivalent	Standard	Standard	Standard	Standard	VIP	VIP	No	Yes	Yes	Yes
Top and Bottom Directional Antennas	Yes	Yes	Yes	Yes	No	No	Yes	Optional (+ \$1,085)	Optional (+ \$1,085)	Optional (+ \$1,085)
Altitude Alerting	Yes w/ATD150	Yes w/ATD150	Yes w/ATD150	Yes w/ATD150	No	No	No	No	No	No
Range	7nm	13nm	17nm	21nm	11 nm	35 nm	40 nm	12nm	40nm	40nm
Number of Targets Displayed	30 using Arinc 429, 9 using RS-232				10	10	30	30	30	30
Number of Targets Tracked	50	50	50	50	30	35	60	60	60	60
Ground Mode	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
Approach Mode	Yes w/ATD or MHD	Yes w/ATD or MHD	Yes w/ATD or MHD	Yes w/ATD or MHD	No	No	No	No	No	No
Yoke Mount Mute	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
N-Number Capability	Yes	Yes	Yes	Yes	No	No	No	ADS-B Targets Only	ADS-B Targets Only	ADS-B Targets Only
Target Transponder Ident Squawk	Yes	Yes	Yes	Yes	No	No	No	No	No	No
ADS-B Capable	Yes Upgradeable	Yes Upgradeable	Yes Upgradeable	Yes Upgradeable	No	Yes Upgradeable	No	Yes	Yes	Yes
System Weight Comparison data based on available v	8.71lbs	8.71lbs	8.71lbs	8.7lbs	8.95lbs	8.95lbs	15.20 lbs	12.34lbs	14.24lbs	14.24lbs

Key TAS Comparison Points: - Avidyne vs Garmin

Garmin GTS800 Series

Avidyne TAS600 Series

Garmin GTS820/850 requires <i>Garmin-brand</i> Mode-S transponder (i.e.GTX330) which may add cost.	TAS600 has no specific requirement or restriction for transponder.				
Garmin GTS8XX requires <i>Garmin-brand</i> GPS (430/530/480) for ADS-B In, which may add cost.	TAS600 has no specific requirement or restriction for GPS.				
GTS820/850 requires the GPA65 power amplifier to be installed close to the top antenna. (difficult and costly)	TAS600 Series does not require an external power amplifier.				
GTS8XX antennas each require 4 coax cables (8 total with dual directional antennas and 12 required on GTS820/850 with power amplifier)	TAS600-Series only requires 2 antenna cables per antenna (4 total)				
GTS8XX series has no gray code altitude input – requires serial encoder, which means added cost/complexity, weight/ pitot/static test	TAS600-Series accepts standard gray code altitude input				
GTS8XX series requires extensive configuration using PC program, down to listing the attenuation of each cable.	PC configuration not required with TAS600 Series.				
GTS800 weighs 12.34 lbs GTS820/850 weighs 14.24lbs.with power amp.	TAS600 Series weighs 8.71 lbs (29.1% lighter) TAS600 Series weighs 8.71 lbs (40.5% lighter)				



Avidyne's TAS600-Series - Proven & Experienced

- Cessna Aircraft
 - Cessna 350 & 400
- Cirrus Aircraft
 - SR20 & SR22
- Diamond Aircraft
 - DA20, DA40 & DA42
- Eurocopter
 - EC135's EC145's, and EC155's
- Extra Aircraft
 - EA500 Spirit
- KAI
 - KC-100
- Piper Aircraft
 - PA-46 Matrix
- Baltimore City Police
 - EC120's
- Baltimore County Police
 - AS350's

- LAPD ...Over 10,000 Avidyne Traffic Systems in service.
 - AS350's
- LA County Sheriff
 - AS350's
- California Highway Patrol
 - Cessna 206's & Helicopters
- US Customs & Homeland Security
 - EC120's, AS350's, Blackhawks,
 C206, C210, King Airs
- Dekalb County GA
 - AS350's
- Florida Highway Patrol
 - 6-SEP Cessna's & 1 Navajo
- Ohio State Highway Patrol
 - SEP Cessna's & Eurocopters
- Maryland State Police
 - Eurocopter AS365's
- German Border Patrol
 - EC135's EC145's, and EC155's























Top 4 Reasons to Consider TAS600 Series

Safety

- The foremost concern when choosing a traffic system for your aircraft.
- Customers want peace of mind and protection for them, their family, their plane
- Active-Surveillance means no dependence on ground-based systems
- Dual antenna systems provide best signal coverage, reduce shadowing

Ease of Installation

- TAS600 Series are easiest dual-antenna TAS systems to install.
- TAS600 Series does not require a separate power amplifier
- TAS600 Series only needs 4 coaxial antenna cables (versus 8 or 12)

Functionality

- TAS600 Series has most display interface options (RS-232 & ARINC 429)
- Provides N-Reg and Squawk Code read out of Mode S-equipped Targets
- Ground & Approach Modes eliminate nuisance alerts

Price

- At \$8,490, TAS600 Series offers lowest price point available for active-surveillance traffic.
- Four different price/performance points to match the mission profile of the aircraft
- TAS600 Series are smallest, lightest, and most affordable TAS systems on the market today.

