

XP Series situational awareness solutions

MODE A, C, AND S TRANSPONDERS | ADS-B & GPS | CIVIL & MILITARY















Mission Proven. DoD Certified. FCC Approved.

In service for more than a decade with over 1.5 million mission flight hours, Sagetech's XP Series of transponders deliver unmatched reliability with advanced performance in one small, high-powered package.

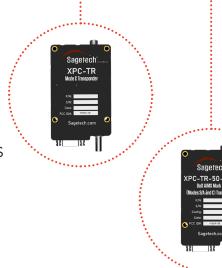
These units currently fly on most Group II and III programs around the globe. Select from military or civil versions and get your program off the ground today.

XPC AND XPC AIMS MODE C TRANSPONDERS

DOD CERTIFIED WITH AUTOPILOT INTEGRATION

A proven performer for over 1.5M+ mission hours in military applications, the Sagetech XPC and XPC DoD certified AIMS transponders deliver ultra reliability in the lowest SWaP available. The XPC transponders are easy to integrate for exceptional situational awareness on unmanned aircraft.

Certified and non-certified units are available now and ship from stock.



XPS MODE S TRANSPONDER

WITH ADS-B OUT

The Sagetech XPS Series transponder delivers ADS-B Out capability with the highest reliability available in a single, tiny, FCC-approved package. With visibility by TCAS, the XPS provides the ultimate in UAV visibility and safety.

XPS units are designed to FAA TSO standards and ship from stock.



CERTIFIED FUNCTIONALITY BUILT ON PROVEN MILITARY HERITAGE

- Certified to DOD AIMS 03-1000B Mark XA specification
- Can be seen by TCAS
- Modes 3/A and C
- Plug and play with most common autopilots
- Extremely low size and weight: 3.5" x 1.8" x 0.7", 3.5 ounces (100 grams)
- Low power: < 1W standby, 4 watts (typ), 11 watts (max)
- Designed to FAA TSO standards
- Integrated altitude encoder per SAE AS392c, SAE AS8003
- Performance to RTCA DO-144A
- Intuitive command and control software included
- Federally approved: XP family FCC ID: YT5XP-TR





MILITARY AND CIVIL MISSION READY



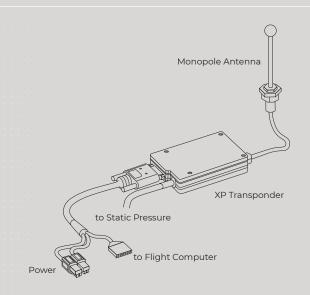
SMALLEST CERTIFIED SWAP AVAILABLE



AUTOPILOT INTEGRATION



FCC APPROVED



COMPLETE FUNCTIONALITY IN A SINGLE INTEGRATED UNIT

- Modes 3/A, C, and S
- ADS-B Out (extended squitter) to performance standard RTCA DO-260B
- Serial comms: proprietary protocol RS-232 up to 460.8 kbps / Accord NexNav, NMEA RS-232, adjustable data rate
- Integrated altitude encoder to 85K feet per SAE AS392c, SAE AS8003
- Full output power over temperature range
- · Can be seen by TCAS
- Performance to RTCA DO-181E
- Plug and play with common autopilots
- Low power: <1W standby, 4 watts (typ), 11 watts (max)
- Small size and weight: 3.5" x 1.8" x 0.7", 3.53 ounces (100 grams)
- Intuitive command and control software included
- Federally approved: XP family FCC ID: YT5XP-TR



CIVIL BVLOS MISSION READY



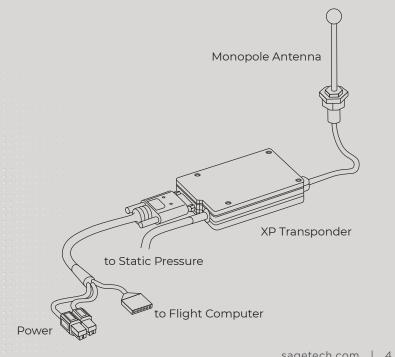
UNPRECEDENTED MICRO SWAP



INTEGRATED ADS-B OUT



FCC APPROVED



XPG MODE S TRANSPONDER

WITH ADS-B OUT AND GPS

The XPG is an all-in-one transponder offering the most visibility in a tiny integrated package. This single unit features Modes A, C, and S, ADS-B Out, plus integrated GPS functionality. The XPG is the only transponder available in its class that can be seen by TCAS.



FCC-approved units ship from stock.

THE MOST FEATURES INTEGRATED INTO A SINGLE TRANSPONDER

- Designed to FAA TSO standards
- Integrated ADS-B Out (extended squitter) to performance standard RTCA DO-260B
- Integrated altitude encoder to 85K feet per SAE AS392c, SAE AS8003
- Integrated GPS, no need to integrate an exterior component
- Full output power over temperature range
- Plug and play with common autopilots
- Performance to RTCA DO-181E
- Low power: consumes <1W standby, 8W (typ), 11W (max)
- Small size and weight: 4.0" x 1.8" x 1.0" (147 grams)
- Intuitive command and control software included
- Optional integration kit available



INTEGRATED GPS FOR 24/7 AWARENESS



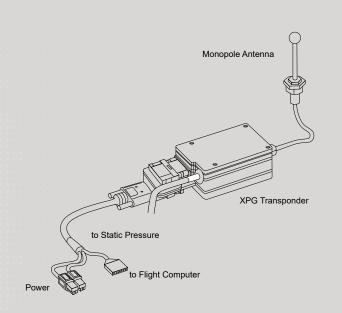
INTEGRATED ADS-B OUT



UNPRECEDENTED MICRO SWAP



BE SEEN BY TCAS



Parameter	XPC-TR Mode C Transponder XPC-TR-50 AIMS Mode C Transponder	XPS-TR Mode S Transponder	XPG-TR Mode S Transponder with GPS
General / Communications			
Operating Altitude		Unrestricted	

Operating Altitude	Unrestricted		
Cruising Speed	Unrestricted	Unrestricted	1,000 Knots
Transmit Power	250W nominal		
1030 Receive Sensitivity	-73 dBm ± 4 dB	-74 dBm ± 3 dB	-74 dBm ± 3 dB
1090 ADS-B In Sensitivity	N/A		
ADS-B Out (Extended Squitter)	No	Yes	Yes
RF Impedance	50 Ω		
Serial Comms			
Com0 Control	Proprietary protocol RS-232 up to 460.8 kbps		
Com2 GPS Input	N/A	Accord NexNav, NMEA RS-232, adjustable data rate	N/A
Mutual Suppression (3.3V LVTTL)	Yes	Yes	No
Pressure Altitude Calibration	20,000 ft (also available in 50,000, 60,000 and 85,000 ft.)		

er	
rt Classification	EAR ECCN 7A994

Supply Voltage	10-32 V		
Power Consumption (ON & ALT)	4 Watts (typical) 11 Watts (max)	4 Watts (typical) 11 Watts (max)	8 Watts (typical) 14 Watts (max)
Power Consumption (STBY)	<1 W		

Design Objectives

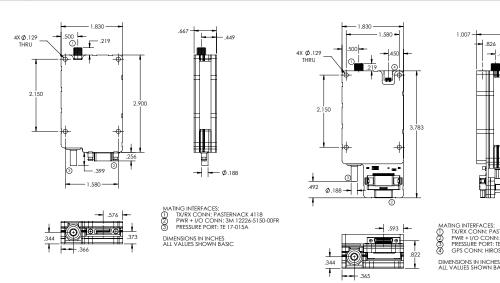
Expor

Transponder Performance Standard	RTCA DO-144A	RTCA DO-181E	RTCA DO-181E
Level	N/A	2els	2els
Class	А	1	1
ADS-B Performance Standard	N/A	RTCA DO-260B	RTCA DO-260B
Class	N/A	B1S	B1S
Pressure Altitude Standards	SAE AS392c, SAE AS8003		

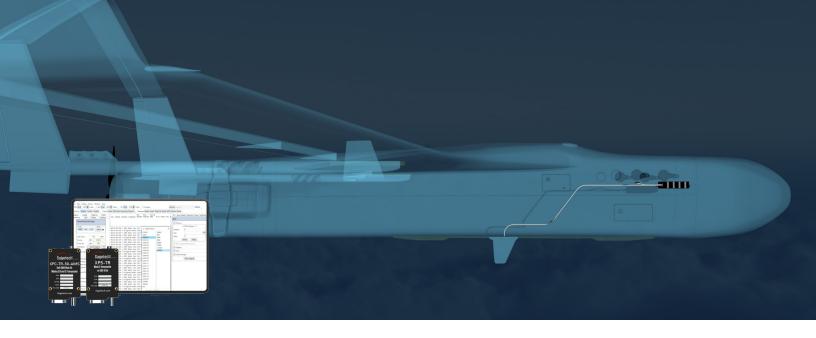
Physical/Environmental

FCC		Part 87 FCC Identifier YT5XP-TR		
Dimensions	89 x 46 x 18 mm (3.5 x 1.8 x 0.7 in)	89 x 46 x 18 mm (3.5 x 1.8 x 0.7 in)	102 x 47 x 26 mm (4.0 x 1.8 x 1.0 in)	
Mass	100 g (3.53 oz)	100 g (3.53 oz)	147 g (5.19 oz)	
Operating Temperature	-20 to 70 °C (-4 to 158 °F)	-20 to 70 °C (-4 to 158 °F)	-20 to 55 °C (-4 to 131 °F)	
Storage Temperature	-55 to 85 °C (-67 to 185 °F)	-55 to 85 °C (-67 to 185 °F)	-55 to 80 °C (-67 to 176 °F)	
Humidity		Max: 95% non-condensing		

MECHANICAL DRAWING



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INCLUDED SOFTWARE

All our products include a GUI and the other software components you need to integrate with your onboard systems.

INTEGRATION MADE EASY

Select from a variety of antennas, cables. and test boxes to quickly integrate transponders into your system.

CUSTOM ENGINEERING

We often work with our customers to optimize a solution for a particular program or develop something new. Just contact us for details.

ADDITIONAL SOLUTIONS

See Sagetech's next generation MX platform of situational awareness solutions featuring AIMS Mark XIIB certified transponders, interrogators, and Detect and Avoid Solutions.

WE FLY WITH THESE CUSTOMERS AND PARTNERS





L3HARRIS"





MARTINUAV

















Raytheon











AMERICAN AEROSPACE



Sagetech is an aerospace technology company, empowering safe flight in unmanned aircraft with the world's most reliable UAV transponders. Currently serving military and civil duty on most small to medium UAVs, Sagetech solutions are missionproven and offer decades of program experience, certifications, and millions of flight hours to deliver maximum value over the life of an unmanned platform. Today Sagetech is expanding its technology platform to create comprehensive unmanned aircraft situational awareness systems, such as detect and avoid solutions. Sagetech works in concert with its extensive ecosystem of OEM customers, technology partners, and resellers to ensure UAVs fly safer with Sagetech on board.







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