

TT26 – ONE BOX – FOUR UAS SOLUTIONS



5 reasons to buy

- Mode S transponder – 1090 ES
- ADS-B Out – ETSO certified to the latest FAA standard
- GPS, primary navigation source – ETSO certified
- Altimeter, primary altitude source – ETSO certified
- Integrates with auto-pilot / control systems - RS232 or RS485

Trig - setting the standard for safer UAS operations

Today's Unmanned Aircraft Systems operators (UAS's) require the highest standards of surveillance equipment to ensure accurate and safe flight operations. The TT26 is unique, providing a level of compliance and technical performance that makes it ideal for serious multi-mission UAS platforms.

A one box solution, the TT26 includes Mode S and ADS-B Out, but also features a C145 GPS and certified altimeter. The complete unit is certified for use up to 70,000 feet and even features a built in altitude encoder, saving additional space and weight. Both the GPS and altimeter can be used as primary flight sources, providing certified data to onboard auto-pilot systems.

The TT26 is designed to integrate and support a wide range of UAS control and auto-pilot systems. This makes it a practical retro-fit - significantly boosting the capabilities of existing UAS platforms.

The Trig unit transmits ADS-B Out using 1090 ES. This is the ICAO international standard for ADS-B and enables global operations. The TT26 makes any UAS platform highly visible on popular TCAS I and TCAS II systems that are used in most commercial airplanes for collision avoidance. The TT26 is also visible to increasing numbers of ADS-B In equipped general aviation types. At the heart of the TT26 is a Class 1 transponder which meets the latest FAA standard for ADS-B Out. With a high power 250 Watt transponder output the TT26 gives maximum flexibility to accommodate high speed and high altitude flight.

TRIG

Efficient design benefits UAS performance

The efficiency of the TT26 is outstanding. The unit is housed in a robust box that can be installed as an LRU. The power required to drive the complete unit is typically between 0.15 Amps and 0.34 Amps, reducing the power burden on other onboard systems. With a unit weight of 1lb all this capability helps to maximise the endurance and potential range of the UAS platform.

Simple integration

The TT26 is designed to integrate with other on board avionics. It uses industry standard RS232 and RS485 protocols – this makes installation straight forward and operations in the field, such as data and flight profile programming predictable. The TT26 data bus will support a range of autopilots and flight sensors common in various UAS airframes. An installation tray is provided, however the option of installation using the unit's built in mounting points is possible, saving additional weight.

Trig capabilities

Trig has an established track record, providing certified ADS-B and VHF communication products to the UAS sector. Using Trig technology demonstrates surveillance best practice and endorses the safety of your operations.

As experts in ADS-B we were the first company in the world to achieve TSO C166b, the highest global standard for ADS-B Out. Across the globe increasing numbers of UAS operators are using our 'better by design' avionics that include our TY91L light weight VHF radio and other sector specific transponder products.

Trig Support

We have wide experience of successfully assisting customers to integrate our technology within their UAS systems. Trig has an established global support network and the best level of warranty provision in the industry.



1090ES ADS-B Out Mode S Transponder with Integrated GPS and inbuilt altitude encoder for UAS platforms

Type	Transponder Class 1 Mode S level 2els, ADS-B Class B1S. GPS GNSS WAAS/SBAS Pressure Altitude Encoder
Certification	ETSO C145c, C88b, C166b, C112e, C10b
Compliance	ED-73E, DO-229D, DO-260B, DO-178B, DO-254, DO-160G, AS8003 /AS392C
Supply voltage (DC)	11 – 33 V
Typical consumption	(at 14V): idle: 0.33 A, active: 0.50 A
Transmitter power	250 W [53dBm] nominal at connector
Interface	RS232, RS485 as standard
Operating temperature	-55°C to +55°C
Operating altitude	70,000 feet
Cooling requirement	No fan required
Weight	TT26 standard unit - 475g Installation with tray - 495g
Unit dimensions	L x 153mm H x 62mm W x 72mm



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