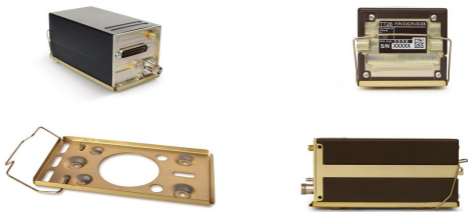


## UAS PRODUCTS



## TT26 TRANSPONDER – SETTING THE STANDARD FOR SAFER UAS OPERATIONS

Today's Unmanned Aircraft Systems (UAS) operators 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 the built in altitude encoder saves additional space and weight. Both the GPS and altimeter can be used as primary flight sources, providing certified data to on-board auto-pilot systems.

## FEATURES

- Mode S transponder – 1090 MHz Extended Squitter
- ADS-B Out – ETSO certified to the latest FAA standard
- ETSO certified GPS – primary navigation source
- Built in altitude encoder – certified for flight to 70,000 feet
- ETSO certified altimeter – primary altitude source
- Integrates with UAS autopilot systems – via RS232 or RS485 interfaces
- Mount either by fixing points on the unit or using the supplied avionics tray
- Unit weight 1.04lb
- No external cooling required
- Two year worldwide warranty

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, these 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 Mode S transponder that 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.

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 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 interfaces – this makes installation straight forward and operations in the field, such as data and flight profile programming predictable. The TT26 data bus can 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.

## VERSIONS

Model	Operating altitude	Capabilities	Typical consumption
TT26 UAS	70,000 feet	Mode S / ADS-B Out 1090ES TSO-C145 GPS	Certified altitude encoder (for altitude) Certified GPS (for navigation) (at 14V): idle: 0.33 A, active: 0.50 A

## SPECIFICATION

Typical consumption (at 14V): idle: 0.33 A, active: 0.50 A

<b>Product/ Model</b>	<b>1090ES ADS-B Out Mode S Transponder with Integrated GPS and inbuilt altitude encoder for UAS platforms</b>
<b>Type</b>	Transponder Class 1 Mode S level 2els, ADS-B Class B1S. GPS GNSS WAAS/SBAS Pressure Altitude Encoder
<b>Certification</b>	ETSO C145c, C88b, C166b, C112e, C10b
<b>Compliance</b>	ED-73E, DO-229D, DO-260B, DO-178B, DO-254, DO-160G, AS8003 /AS392C
<b>Supply voltage (DC)</b>	11 – 33 V
<b>Transmitter power</b>	250 W (53dBm) nominal at connector
<b>Interface</b>	RS232, RS485 as standard
<b>Operating temperature</b>	-55°C to +55°C
<b>Operating altitude</b>	70,000 feet
<b>Cooling requirement</b>	No fan required
<b>Weight</b>	TT26 standard unit – 475g Installation with tray – 495g
<b>Unit dimensions</b>	L x 153mm H x 62mm W x 72mm

## 12.1 Direct Chassis Mount



All dimensions in millimetres