THE SMART MODE S AND ADS-B SOLUTION FOR ROTARY AND FIXED OPERATORS

Compact single controller, dual TT22

Dual TT22 – Mode S (ADS-B Out)

Dual TT31 – Mode S (ADS-B Out)

The benefits of fitting Trig

- Trig’s Mode S and ADS-B solution - certified to FAA TSO C166b
- 1090ES International Standard - fit and fly anywhere!
- Significant cost savings to fleet operators
- Flexibility and ease of installation
- Trig Support and ADS-B expertise

Trig are the Mode S and ADS-B experts

Trig were the first company in the world to secure FAA TSO C166b certification for our ADS-B Out transponder technology. The TT31 is a class leading conventional mount transponder and the TT22 is the world’s smallest compact transponder – both are IFR/VFR capable and ideally suited to become the hub of your compliant Mode S transponder and 1090ES ADS-B Out solution.

Trig Avionics are delighted to offer fleet operators all the performance benefits of our proven certified avionics, in a cost effective ADS-B Out package that you might not have considered possible.

Trig’s own STC program is growing, adding new aircraft types that can carry Trig Mode S and ADS-B equipment. Third parties are also fitting our avionics in their STC aircraft programs. This includes offshore rotary customers, who have shown that our technology is suited to harsh operating environments, where dependability and reliability is vital.
Many aircraft are equipped with Mode S, but an additional requirement for a compliant ADS-B Out is now emerging in a number of regions. Trig supports 1090ES, the ICAO International Standard for ADS-B Out that can be used in any airspace without restriction.

A Trig solution is more affordable than many existing alternatives and installation options are flexible, for example if replacing your existing transponder you can use existing antenna and cabling. The TT31 is the most energy efficient device in its class, so it actually increases the reliability of your entire stack. The TT22 compact transponder controller can be fitted in a space saving ‘compact mount’ form or in a 2 1/4 inch instrument hole. The TT22 controller’s small size enables it to be easily accommodated outside the main avionics stack – the associated transponder hardware box can be fixed elsewhere in the airframe.

Both TT31 and TT22 transponders have a redundancy capability, enabling duplicate units to be A/B switched. If panel space is limited redundancy can be provided via a single TT22 controller, fitted with an A/B switch and two TT22 hardware boxes. These options help ensure that critical avionics are available 24/7, keeping your aircraft online.

Having a certified WAAS GPS is a necessary part of a compliant ADS-B Out installation, this guarantees the integrity of the aircraft position at all times. Trig recommends an equally compact choice of compatible WAAS GPS position sources for our ADS-B Out system. The FreeFlight 1201 and NexNav™ Mini WAAS GPS are ‘blind units’ that have been validated in our ongoing STC and Trig flight test programs - they are ideally suited for use with Trig transponders.

Trig transponder compatibility with Garmin’s GNS430W and GNS530W GPS units has been established via successful ADS-B flight trials in Australia. Use of these units in the U.S. is subject to a pending STC. Our ongoing software compatibility program will see other third party devices added in the future, check our website for details.

Trig’s Mode S / ADS-B Out system uses;

- Either our TT31 or TT22 – Class 1 Mode S, 1090ES ADS-B Out transponders
- Compatible certified WAAS GPS system
- For redundancy – a suitable switching mechanism for A/B use, if required
- Automatic Ground Air Determination via a Squat Switch, Airspeed Switch or Air Data Computer (mandatory in the U.S.)

Trig Support

As pioneers in ADS-B technology, we have EASA and FAA certified equipment that can be used globally today.

Join those already depending on Trig for smart, affordable and future proof avionics.

When you buy Trig you get access to Trig Support and of course one of the best warranty programs in the industry. If you have a fleet Mode S and/or compliant ADS-B Out requirement then please contact us at enquiries@trig-avionics.com.

FreeFlight 1201 WAAS GPS and TT22 transponder in a S-76C+

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