Brochure

VIAVI TC-201A TCAS/Transponder Antenna Coupler

A combined TCAS and transponder directional antenna coupler for the avionics maintenance industry.

The VIAVI TC-201A Antenna Coupler is used on TCAS and combined TCAS and transponder directional antennas, to shield the RF signal during testing of the TCAS or transponder system. The TC-201A, when used with the IFR6000, IFR6015 or APM-424(V)5, supports maintenance testing in the airborne condition without interfering with air traffic control or nearby aircraft.



Features

- Accommodates both phase and amplitude type antennas
- Reliable, FAR Part 43, Appendix F, ERP and MTL testing in high multi-path environments

VIAVI Solutions

- Provides >20 dB of isolation
- Provides shielding for all transponder and ADS-B performance testing
- Lower antenna adjustable support pole
- Perform four-quadrant testing by simply rotating the bearing selector dial
- TCAS bearing accuracy < 10 degrees

Benefits

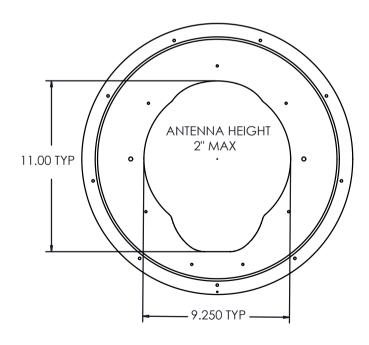
- Reduces interference with air traffic control and nearby aircraft
- High level of measurement repeatability is achieved, saving test time
- Tests all quadrants of directional TCAS or TCAS/Transponder antennas
- No need to achieve line-of-sight with the antenna under test
- Eliminates the need for DD-1494 Frequency Authorization
- Universal design allows coupler to be used with any suitable TCAS/transponder test set

General Specification

| Frequency | 1030 MHz, 1090 MHz |
|------------------|--|
| Return Loss | > 9 dB |
| Insertion Loss | 15.5 dB typical |
| Repeatability | < 1 dB |
| Isolation | > 20 dB |
| Bearing Accuracy | <u>+</u> 18° max, < <u>+</u> 10° typical |
| Connector | TNC female |

Physical Characteristics

| Size: | |
|-----------------------|----------------------------|
| Coupler only | 19 in. diameter (48.26 cm) |
| Kit with transit case | 24.81 x 24.98 x 14.15 in. |
| | (63 x 63.45 x 35.94 cm) |
| Weight: | |
| Coupler only | 11 lbs. (4.9 kg) |
| Kit with transit case | 41 lbs. (18.6 kg) |
| Accommodates | Diameter: 9.25" max |
| Antenna Dimensions: | Oval Dimension: 11" max |
| | Antenna Height: 2″ max |



Order Information

Versions and Options

| Order Number | Description |
|--------------|--------------------------------------|
| 140889 | TCAS/Transponder Antenna Coupler Kit |

Kit Contents

| 22130799 | TC-201A Antenna Coupler |
|----------|-------------------------|
| 142743 | Transit Case |
| 142839 | Coax TNC, 50' |
| 92863 | Attenuator, 30 dB |
| 22136337 | User Guide |
| 142742 | Support Pole |
| | |





Contact Us +1 316 522 4981 avcomm.sales@viavisolutions.com

To reach the VIAVI office nearest you, visit viavisolutions.com/contact.

© 2020 VIAVI Solutions Inc. Product specifications and descriptions in this document are subject to change without notice. TC-201A-br-avi-nse-ae 30187739 902 0920