

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
- Provides >20 dB of isolation
- Provides proper 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

- Eliminates 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	$\pm 18^\circ$ max, < $\pm 10^\circ$ 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)

## 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

### Optional Accessories

142742	Support Pole
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