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Data Sheet

August 3, 2026

MARCONI / IFR / AEROFLEX

Marconi IFR Aeroflex TCAS201 TCAS Ramp Test Set

Marconi IFR Aeroflex TCAS201 TCAS Ramp Test Set The TCAS201 provides an Aeroflex / IFR TCAS (Traffic Alert and Collision Avoidance System) ramp test set for flight-line and hangar verification of airborne TCAS interrogators and related avionics. Ramp test sets inject controlled 1030/1090 MHz-class TCAS scenarios so technicians can verify surveillance replies, advisories, and antenna/path integrity without airborne traffic. Exact scenario depth and RF power limits are configuration-dependent—confirm the faceplate and operating manual for this TCAS201 unit. The TCAS201 provides an Aeroflex / IFR TCAS (Traffic Alert and Collision Avoidance System) ramp test set for flight-line and hangar verification of airborne TCAS interrogators and related avionics. Ramp test sets inject controlled 1030/1090 MHz-class TCAS scenarios so technicians can verify surveillance replies, advisories, and antenna/path integrity without airborne traffic. Exact scenario depth and RF power limits are configuration-dependent—confirm the faceplate and operating manual for this TCAS201 unit. Flight-line TCAS system confidence checks; hangar TCAS computer / antenna verification; ramp testing of Mode S / TCAS reply paths.



MODEL

**Marconi / IFR /
Aeroflex TCAS201**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

TCAS201

LISTING

<https://aumictechlabs.com/products/tcas201-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Marconi IFR Aeroflex TCAS201 is a specialized ramp test set engineered for verification and certification of Traffic Collision Avoidance Systems (TCAS II) installations. It simulates the airborne environment, enabling technicians to perform essential tests during initial installations and routine maintenance while ensuring compliance with Supplemental Type Certification (STC) requirements.

Technical Specifications

The TCAS201 monitors TCAS interrogations and displays decoded information. It generates ATCRBS or Mode S replies to simulate threat aircraft for bearing accuracy checks. The unit supports switchable TCAS I (no P4 width detection) and TCAS II (normal P4 width detection) operation. ATCRBS Reply Test simulates a Mode C transponder with programmable percentage reply, altitude, and range parameters. Mode S Reply Test evaluates the interrogator's ability to receive, decode, and respond to Mode S replies, simulating Mode S transponders with formats DF0, DF11, and DF16. The device generates squitter with selectable squitter address and includes a Broadcast Interrogation Monitor that displays the interrogating aircraft address and contents of major interrogation fields (UF0 and UF16), verifying TCAS Broadcast transmission approximately every ten seconds in UF16.

Key Features

- Scenario simulation with programming flexibility for Traffic Advisory (TA) and Resolution Advisory (RA) alerts
- Simulation of approaching intruders with constant closing rate and constant altitude change rate
- Up to ten user-programmed scenarios stored and recalled
- Whisper-Shout Monitor provides information to verify whisper-shout steps
- Side Lobe Suppression (SLS) Power and Frequency Measurement displays interrogator Effective Radiated Power (ERP) and Frequency
- Built-In-Test (BIT) for confidence testing and fault isolation
- LCD display with automatic light-sensing illumination control
- Soft-press key controls for operation
- Internal battery providing up to 1.5 hours of operation
- Internal battery charging circuit enables recharging when connected to AC power
- Ruggedized construction suitable for ramp conditions

Typical Applications

Initial TCAS II installation verification, routine maintenance testing, STC compliance validation, and bearing accuracy checks on installed systems.

Features & description

From manufacturer datasheet

Features

- Aeroflex / IFR TCAS201 TCAS Ramp Test Set
- Designed for TCAS avionics ramp/hangar testing
- Stimulates TCAS interrogate/reply scenarios in the 1030/1090 MHz aviation SSR/TCAS band class
- Portable ramp-test form factor (confirm connectors and antenna interfaces on unit)
- Related Aeroflex TCAS instruments (e.g. RGS 2000 reply generators) address bench TCAS computer RF resource testing–TCAS201 is the ramp test-set catalog identity

TCAS201 Characteristics / Specifications

PARAMETER	VALUE
Model	TCAS201
Manufacturer	Marconi / IFR / Aeroflex
Instrument Type	TCAS Ramp Test Set
Alias	TCAS201; TCAS-201 RF / Avionics Domain
TCAS / SSR frequency class	1030 MHz (interrogation) and 1090 MHz (replies) aviation bands
Scenario / reply generation	confirm installed software modes and antenna ports on the TCAS201 Power / Environment
AC or battery operation	confirm nameplate Operate per Aeroflex ramp-test RF exposure and antenna placement guidelines Standard Operating Conditions Follow published TCAS ramp-test procedures for antenna coupling distance and power. Observe aviation RF safety around aircraft.

TCAS201 Specifications

PARAMETER	VALUE
Marconi IFR Aeroflex TCAS201 TCAS Ramp Test Set	Overview
Key Features	- Aeroflex / IFR TCAS201 TCAS Ramp Test Set
Technical Specifications	Model: TCAS201
RF / Avionics Domain	TCAS / SSR frequency class: 1030 MHz (interrogation) and 1090 MHz (replies) aviation bands
Standard Operating Conditions	Follow published TCAS ramp-test procedures for antenna coupling distance and power. Observe aviation RF safety around aircraft.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Specifications

PARAMETER	VALUE
Model	TCAS201
Manufacturer	Marconi / IFR / Aeroflex
Instrument Type	TCAS Ramp Test Set
Alias	TCAS201; TCAS-201

RF / Avionics Domain

TCAS / SSR frequency class: 1030 MHz (interrogation) and 1090 MHz (replies) aviation bands

Scenario / reply generation: confirm installed software modes and antenna ports on the TCAS201

Power / Environment

AC or battery operation: confirm nameplate

Operate per Aeroflex ramp-test RF exposure and antenna placement guidelines

Standard Operating Conditions

Follow published TCAS ramp-test procedures for antenna coupling distance and power. Observe aviation RF safety around aircraft.

Operational Notes

Do not confuse TCAS201 ramp test set with Aeroflex RGS 2000 bench TCAS reply generator. Match aircraft TCAS version (I/II) to supported test scenarios on the unit.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.