



# T<sup>3</sup>CAS

## The Next Generation of Safety and Efficiency

The T<sup>3</sup>CAS is the next generation of integrated communication and surveillance products from ACSS. The T<sup>3</sup>CAS features TCAS II, performance-based Class A TAWS, and Mode S Transponder updated for DO-260A with full ADS-B in/out operation. The T<sup>3</sup>CAS provides operators with the same proven performance and reliability of these core functions, in addition to the benefits of reduced weight, volume, wiring, and power consumption in an integrated platform.

The T<sup>3</sup>CAS provides full functionality in both 6- and 4-MCU sizes. It fits into existing TCAS 2000 or T<sup>2</sup>CAS rack and connector. The T<sup>3</sup>CAS utilizes an integrated RF transceiver module for the TCAS and Mode S functions. As a result, only a single set of antennas are required and the aircraft antenna count and cabling requirements are reduced.

The T<sup>3</sup>CAS hosts the suite of SafeRoute™ Automatic Dependent Surveillance-Broadcast (ADS-B) applications from ACSS. SafeRoute is a portfolio of applications utilizing ADS-B IN, Traffic Information Service-Broadcast (TIS-B) and Cockpit Display of Traffic Information (CDTI) technology to improve the safety and efficiency of flight operations. The T<sup>3</sup>CAS will also host a full slate of ADS-B applications in compliance with Eurocontrol's program for Air Traffic Situational Awareness (ATSAW). ATSAW applications provide enhanced traffic situational awareness on the Airport Surface and during flight operations such as Sequencing & Merging, Visual Separation on Approach (VSA), and In-Trail Flight Level Change Procedures (ITP).

For proven functionality, lower acquisition and ownership cost, and increased safety and efficiency, the choice is the T<sup>3</sup>CAS Integrated Platform from ACSS.

A single LRU with the flexibility to host any combination of the following functions:

- Traffic Alert and Collision Avoidance System (TCAS)
- Terrain Awareness Warning Systems (TAWS)
- Mode S Transponder
- SafeRoute ADS-B Solutions
- Air Traffic Situational Awareness ADS-B applications (ATSAW)

Growth capability for future functionality

Increased safety and situational awareness both in the air and on the ground

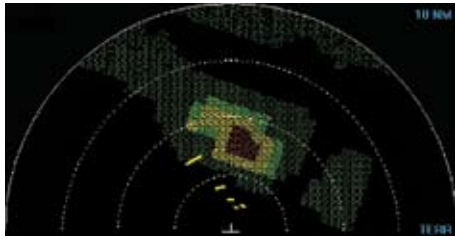
Compatible with the Next Generation Air Traffic Control System (NGATS)

Less weight, volume, and power consumption than a federated system

Lower acquisition and ownership cost

Backward compatible with TCAS 2000 and T<sup>2</sup>CAS

# T<sup>3</sup>CAS ... The next generation of safety and efficiency



## T<sup>3</sup>CAS Integrated Platform

Base P/N	9005000
<b>Physical Size</b>	
Dimensions	4 MCU (7.6 in. H x 4.9 in. W x 15.3 in. L) 6 MCU (7.6 in. H x 7.5 in. W x 15.3 in. L)
Weight/Power	4 MCU: 16.5 lbs. (7.5 kg) / 115 VAC and 28 Vdc 6 MCU: 17.6 lbs. (8.0 kg) / 115 VAC and 28 Vdc
Power Consumption	100 watts nominal
Cooling	6 MCU requires forced air cooling per ARINC 600, 4 MCU has an internal fan
Operating Altitude	Sea level to 55,000 feet
Operating Temperature	-55 to 70 degrees C
Storage Temperature	-55 to 85 degrees C
Data Loading	UDP Protocol based Ethernet connection compliant with ARINC 615A
Antenna	TCAS Directional Antenna P/N 7514081
<b>Certification</b>	
TSO	Transponder (C112) Windshear (C117a) TCAS (C119b) TAWS (C151b) ADS-B & TIS-B (C166a)
Environmental Software	DO-160E DO-178B Level B
ADS-B Operation	DO-260A 1090 MOPS for extended range
ADS-B Receiver Availability	> 95%



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Aviation Communication & Surveillance Systems (ACSS), an L-3 Communications & Thales Company, is a leader in safety avionics systems that increase safety, situational awareness and efficiency for aircraft operators. Based in Phoenix, its products include the TCAS 3000 and TCAS 2000 traffic alert and collision avoidance systems; MASS™, an enhanced TCAS for military operations; a family of Mode S transponders; the T<sup>3</sup>CAS®, and T<sup>3</sup>CAS integrated surveillance systems; and TAWS+, a stand-alone terrain awareness warning system. The ACSS portfolio also includes a suite of automatic dependent surveillance-broadcast solutions for pilots operating in the airport vicinity called SafeRoute™. More than 45,000 units of ACSS product are operating in commercial, corporate and military aircraft. To learn more about ACSS, please visit the company's web site at [acss.com](http://acss.com).



## WORLDWIDE CUSTOMER SERVICE & SUPPORT

ACSS products are based on proven technology to provide you exceptionally high reliability and simplified maintenance. Support for engineering, logistics, commercial and repair support are available through our worldwide network of Customer Service Managers and Support Centers.

Customer Services are provided to aircraft manufacturers and operators. On-site assistance is available to support system integration, troubleshooting, analysis, rework, retrofit and repair of ACSS equipment.

Services include AOG/Emergency Services, Repairs, Maintenance Agreements, Technical Support, Publications, Training, and Database Service.