



TCAS

Significant growth capacity for additional functions

Only TCAS to offer certified ADS-B In (TSO C166) applications

- * Surface Area Movement Management (SAMM)
- * Merging & Spacing (MES)
- * CDTI Assisted Visual Separation (CAVS)
- * Cockpit Display of Traffic Information (CDTI)

Patented amplitude monopulse antenna with high bearing accuracy

Superior intruder tracking performance to track up to 400 aircraft

Extended range

Time and Space partitioned operating system

Easy operational software upgrades via Compact Flash

Backward compatible with TCAS 2000

Maintenance aural for easy installation and troubleshooting

Eventual implementation of Change 7.1

More functions, same footprint

The TCAS 3000 Surveillance Processor (SP) is based on ACSS's very successful TCAS 2000 with more than 10,000 units delivered and proven reliability. The new system gives customers the option of adding certified ADS-B In (Automatic Dependent Surveillance-Broadcast) capability combined with ACSS's industry leading Traffic alert and Collision Avoidance System technology.

The TCAS 3000SP delivers enhancements in reliability and computing power to handle the most demanding applications, including the eventual implementation of TCAS II Change 7.1 and Airborne Separation Assurance System (ASAS) upgrades. Software-only upgrades can be made to add ADS-B In functions such as Surface Area Movement Management (SAMM), Merging & Spacing, CDTI Assisted Visual Separation (CAVS), and Cockpit Display of Traffic Information (CDTI), which are all part of ACSS's SafeRoute suite of ADS-B applications.

The new system provides pilots with the highest bearing determination accuracy (2° rms vs. 9° TSO specification) and extended range surveillance (up to 80 nm active, 100+ nm passive) available. Enhanced Air Traffic Control Radar Beacon System (ATCRBS) range, altitude and bearing-tracker algorithms were developed by ACSS to provide greater than 99% track probabilities, while reducing false tracks to less than 0.5% (60% better than recommended by the FAA Advisory Circular No. 20-131B).

The TCAS 3000SP is completely backward compatible with the TCAS 2000, and provides appreciable operating cost savings through its reduced weight and power dissipation. Other features include an internal data recorder with external PC-based data analysis tool, maintenance aural, and the ability to perform easy on-board software uploads using a built-in compact flash port.

TCAS 3000SP ... More functions, same footprint



TCAS 3000 Surveillance Processor

Base P/N 9003500

Physical Size

Dimensions

4 MCU (7.6 in. H x 4.9 in. W x 15.8 in L)

6 MCU (7.6 in. H x 7.5 in. W x 15.3 in L)

Weight/Power

4 MCU: 14.7 lbs. (6.7 kg) / 28 Vdc only

6 MCU: 16.08 lbs. (7.3 kg) / 115 VAC and 28 Vdc

ARINC 600 6 OR 4 MCU Mount

Mounting

No forced air required for 4 MCU (internal fan)

Cooling

Per ARINC 600/404 for 6 MCU

Certification

Environmental Specifications

DO-160E

TSO

C119b (TCAS), C166 (ADS-B)

Software

DO-178B Level B

ADS-B Capability

RTCA/DO-260A 1090 MOPS

Extended range operations

ADS-B Receiver

Availability > 95%

Operating Altitude

Sea Level to 55,000 feet

Operating Temperature

-55 to 70 degrees C

Storage Temperature

-55 to 85 degrees C

Power Consumption

70 Watts Nominal

Maintenance

Supports OEM Maintenance Computer

Interfaces

Data Loading

Compact Flash

TCAS 3000SP Suite

Processor Unit

Surveillance Processor

Mode S Transponder

RCZ-852 (Business & Regional Transponder)

XS-950 (Air Transport Data Link Transponder)

XS-950SI (Military Mode S/IFF Transponder)

Antenna

AT 910

Displays

Various

Controls

Various

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This technical data and software is considered as Technology Software Publicly Available (TSPA) as defined in Export Administration Regulations (EAR) Part 734.7-11.

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Aviation Communication & Surveillance Systems

Phoenix-based Aviation Communication & Surveillance Systems (ACSS), 70% owned by L-3 Communications and 30% owned by Thales, is a leader in safety avionics systems that increase safety, situational awareness and efficiency for aircraft operators in all phases of flight. More than 60,000 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 www.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.