



RCZ-852

Big Capability in a Small Package

**ACAS II elementary & enhanced
Mode S Surveillance DAPs and
ADS-B 1090ES extended squitter
compatible**

**Certified ICAO Level 3 data link
capability**

**TCAS I or TCAS II compatible
interfaces**

Diversity transponder

Designed for size and weight savings

**Proven, leading-edge technology for
smaller aircraft and helicopters**

Built for the future

ACSS offers full-feature ICAO Level 3 Mode S diversity transponder in a small, lightweight package optimized for regional, corporate aircraft and helicopters. The RCZ-852 is a stand-alone implementation of the Mode S technology integrated into the radio suite currently flying on more than 2,500 regional and business aircraft.

The RCZ-852 is designed to meet environmental requirements of unpressurized aircraft to 55,000 feet, with vibration profiles that meet the requirements for turbojets, fixed wing propeller aircraft and helicopters. When compared with ARINC Mode S transponders, the RCZ-852 is smaller, lighter and requires less power. The RCZ-852 is designed for compatibility with all currently available TCAS I and TCAS II systems.

The RCZ-852 Mode S transponder has been designed for reliable performance and ease of maintenance. Highly Accelerated Life Testing (HALT) was performed on all engineering models of the RCZ-852. Each production RCZ-852 unit is subjected to Highly Accelerated Stress Screening (HASS) before being shipped to customers to ensure the highest product quality.

High dependability of our Mode S transponder greatly enhances the overall TCAS system reliability by reducing Mode S transponder-induced TCAS no-fault-found failures. Extensive BIT (Built-In Test) ensures that approximately 90 percent of the circuitry is tested during system operation.

The RCZ-852 Mode S Transponder is easily upgradeable for tomorrow's technology requirements. It has all of the required functionality for ICAO ACAS II mandate compliance, European Elementary and Enhanced Mode S Surveillance Downlink of Aircraft Parameters (DAPs), and ADS-B 1090ES extended squitter, as defined in the Aeronautical Information Circulars (AICs) and ICAO SARPS.

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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.



System Specifications

Part Number	7510700-XXX
Physical Size	Height: 3.4 inches Width: 4.1 inches Length: 14.01 inches
Weight	5.0 lbs / 2.27 kg
Cooling	Not required

Certification

Environmental Specifications	DO-160B
TSO	C112
Software	DO-178B Level B
Transponder Data Link Capability	ICAO Level 3 (COMM-A/B/C)
ADS-B Capability	1090ES Extended Squitter per RTCA DO-260 MOPS for 1090 ADS-B Equipment
Operating Altitude	Sea level to 70,000 feet
Operating Temperature	-55 to 70 degrees C
Storage Temperature	-55 to 85 degrees C
Power	28 VDC
Power Consumption	30 Watts (standby), 55 Watts (maximum)
Number of Antenna Ports	2 (diversity)

Interfaces

Controller	ARINC 429
TCAS I	ARINC 429
TCAS II	ARINC 429
Airborne Data Link Processor (ADLP)	ARINC 429/718
Altimeter	ARINC 429/575 (digital air data), ARINC 407 (synchro), Gilham II-wire discrete
Flight Identifier	ARINC 429

ACSS
An L-3 Communications
& Thales Company

19810 N. 7th Avenue
Phoenix, AZ 85027-4400
Telephone: (623) 445-7000
Fax: (623) 445-7001
www.l-3com.com/acss

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 Support Managers and Support Centers.

Customer Support 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.

Aviation Communication & Surveillance Systems

ACSS, an L-3 Communications & Thales Company, is a leader in safety avionics systems. ACSS products include the TCAS 2000 and TCAS 1500 traffic alert and collision avoidance systems, a family of Mode S transponders, the T²CAS™, a combined traffic and terrain collision avoidance system, and MASS™, an enhanced TCAS system for military operations. More than 9,000 units of ACSS's TCAS products are operating in commercial, corporate and military aircraft.