

# TAWS+

Standard or Full-Performance

Terrain Advisory Line (TAL)

Avoid Terrain

Engine-Out

Turn Extrapolation

Available as Stand-Alone or as  
a Function Within T<sup>2</sup>CAS™ and  
Protector+™

## The Superior Strategic and Tactical Tool

The TAWS+ Terrain Awareness Warning System from ACSS brings advanced terrain prediction and avoidance technology into your cockpit in a stand-alone package providing superior functionality at lower cost. In applications where ACSS's combined TAWS and Traffic Alert and Collisions Avoidance System (TCAS), the T<sup>2</sup>CAS™, is not needed, TAWS+ is the safer terrain solution.

TAWS+ has the patented Terrain Advisory Line (TAL), "Avoid Terrain" and Engine-Out features. These advanced functions encompass terrain and airport databases. Available with standard aircraft climb rate, TAWS+ offers a unique set of enhanced features in a 2-MCU line-replaceable unit (LRU). An optional GPS card can be installed in the same unit, providing even greater situational awareness capability. The same capability is available as part of T<sup>2</sup>CAS or the Protector+™.

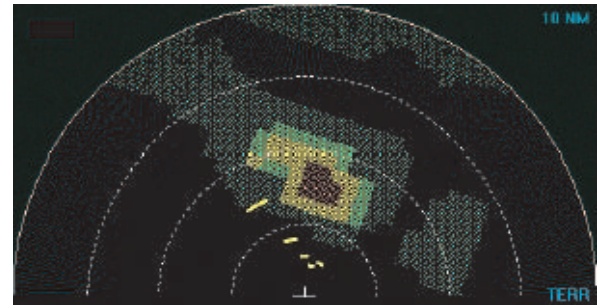
### **TAWS+*performance***

Building on the TAWS+ capabilities, TAWS+*performance* is a step beyond conventional TAWS offering the higher level of safety afforded by basing alerts on an aircraft's actual ability to climb. Sophisticated modeling of aircraft climb capabilities provides the most complete picture for improved situational awareness. For a higher level of safety, turn to TAWS+*performance*.

# TAWS+ ... Break the Accident Chain Early

## Exclusive Feature - Terrain Advisory Line

In addition to aural and visual alerts, TAWS+ provides enhanced situational awareness with our unique Terrain Advisory Line (TAL) feature. Extending the conventional TAWS cautionary terrain segment – relative to the current aircraft altitude but providing no idea of where alerts will occur – the TAL reaches out to 30° on either side of the aircraft flight path and out as far as two minutes in front of the aircraft, providing crew with an enhanced indication of potential hazards in the current flight path. The TAL allows pilots to think...not just react.



The TAL allows pilots to *think*...not just react.



## Physical Characteristics

Model: TW-950  
 Size: 2 MCU  
 Weight: 8.5 lbs. (3.86 kg)  
 Power: 32 watt typical  
 Cooling: Passive  
 Software: DO-160D / DO-178B

## Operating Environment

Temperature range (operating): -55 to +70 degrees C  
 Temperature range (non-operating): -55 to +85 degrees C  
 Operating altitude: 55,000 ft.

Feature	Benefit	TAWS+	TAWS+ performance
Flight path predictions based on actual climb performance	Alerts based on aircraft's ability to avoid terrain	No	Yes
Terrain Advisory Line	Higher level of situational awareness	Yes	Yes
"Avoid Terrain" alert	Enables pilot to include a turn avoidance manoeuvre if pull up is not enough	Yes	Yes
Engine-Out performance alert	Alerts pilot to limited climb capability due to engine loss	Yes	Yes
Turn Extrapolation	Detects and alerts pilot to high terrain in a turn	Yes	Yes
Landing convergence prediction	Reliable predictive alerting until touchdown	Yes	Yes
Suppression of Mode 1 and Mode 2 alerts while predictive look-ahead is active	Prevents nuisance alerts	Yes	Yes
GPS option	Nav grade, independent position	Yes	Yes

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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 T<sup>2</sup>CAS™, 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.

## AIR TRANSPORT CUSTOMERS

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## 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.