

# Honeywell Mark VI EGPWS



ENHANCED GROUND PROXIMITY  
WARNING SYSTEM

**Advanced safety system  
for turboprop aircraft**

**Honeywell**

### **Controlled Flight Into Terrain and Obstacle Protection.**

Honeywell's Mark VI Enhanced Ground Proximity Warning System (EGPWS) is an advanced Terrain Awareness Warning System (TAWS) that protects turboprop aircraft against potential collisions with terrain and obstacles. By using a highly integrated and field-proven combination of classic Controlled Flight Into Terrain (CFIT) modes and enhanced terrain look-ahead algorithms, Honeywell has designed the Mark VI EGPWS specifically for the lower altitudes, slower speeds, and faster engine response times of turboprop aircraft. The system uses the same sophisticated EGPWS system and databases used in Mark V and Mark VII models installed in larger jet aircraft, only the Mark VI EGPWS is customized for the specific flight characteristics and operational environment of most turboprop and larger piston aircraft. The Mark VI maximizes response time for turboprop aircraft by providing pilots more warning time through aural and visual notification of potential terrain or obstacle danger so operators have an opportunity to execute a safe recovery and minimize the risk of CFIT.

### **Reliability and accuracy.**

Honeywell's EGPWS allows pilots to know precisely where the aircraft is in relation to terrain and obstacles at all times. The EGPWS databases cover 100 percent of the Earth's terrain in high resolution data with more than 12,000 airports, 30,000 runways and 108,000 obstacles and is continuously updated and tested. The system's accuracy is based on this exclusive database, Honeywell's proprietary look-ahead algorithms and the use of Geometric Altitude. This precision allows pilots to receive the most accurate information with far more warning time to execute corrective maneuvers—with virtually no false warnings. Built on more than 30 years of expertise and 250 million flight hours, EGPWS delivers high performance, precision, and reliability for retrofit and new aircraft that pilots know they can trust.

### **High performance and value.**

For the Mark VI system, we combine extensive GPWS features with state-of-the-art navigation and altimetry, the industry's most comprehensive and accurate database, and leading display technology to deliver high performance, reliability, and value for regional carriers and general aviation operators. Honeywell has a history of providing proven Enhanced Ground Proximity Warning Systems, credited with avoiding more than 30 potential CFIT incidents. With certifications for almost any aircraft (more than 250 types), the entire line of EGPWS products offer accuracy and long service life, have extensive avionics compatibility for quick installation and have worldwide hands-on field support. Plus, software and terrain database updates are available regularly for maximum protection.

### **Enhanced safety features for takeoff, climb, cruise, approach, and landing.**

This Class A EGPWS is a full-capability, six-mode GPWS incorporating forward-looking terrain warning and display. The non-ARINC-sized box is available in 28v DC only and requires GPS position input, or optional internal GPS card. Terrain can be displayed on compatible radar indicators, FMS CDUs, or standalone displays. Specifically engineered for turboprops and piston aircraft with limited analog and digital avionics, the Mark VI provides both aural and visual warnings. Mode 1–6 alerts and warnings include:

- Threatening terrain, water, and obstacles.
- Look-ahead alerts and warnings based upon aircraft flight profile, performance, and terrain/obstacle threats.
- Terrain clearance floor alerts on approach and landing.
- Envelope Modulation tailoring EGPWS alerts at certain geographic locations, providing added protection and reducing potential nuisance alerts.
- Numerous altitude callout options.
- Bank angle alerts.



With bank angle alerts tailored to any size turboprop or piston aircraft, the Mark VI offers even more precise alerting based on aircraft performance, providing an added layer of safety against CFIT

## Specifications

Packaging	Non-ARINC
Weight	3.5 pounds/1.6 kg maximum
Power	28 VDC, 16 watts normal operation
Cooling	Per ARINC 600-6, forced-air cooling not required
Environmental	Meets RTCA DO-160C
MTBF	12,500 operating hours
Performance:	CAA Spec 14, ARINC 723-1
GPWS	Meets RTCA DO-161A
Software	Meets RTCA DO-178B Level C and D
Certifications:	
TAWS	TSO-C151b, Class A
GPWS	TSO-C92c
Data Loader	Databases updated via the front-panel PCMCIA and smart cable interface

## Features

Excessive Descent Rate	✈
Excessive Closure to Terrain	✈
Altitude Loss after Takeoff	✈
Unsafe Terrain Clearance	✈
Excessive Deviation Below Glideslope	✈
Steep Approach Capability	✈
Terrain Alerting	✈
Terrain Clearance Floor	✈
Terrain Database	Regional (Americas, Pacific, Atlantic)
Obstacles Database	✈
Airport Runway Lengths	Greater than 2,000 feet
Geometric Altitude	✈
Envelope Modulation	✈
Altitude Callouts	✈
Internal GPS Card Option	✈
Enroute Terrain Display (Peaks Mode)	✈
Display Compatibility:	
Radar Indicators	✈
Standalone	✈
Power	28 VDC, 16 watts
Approximate Dimensions (H x W x L)	6.2 x 3.0 x 12.1 inches

In the air and on the ground, Honeywell's aerospace products can be found on virtually every type of aircraft worldwide. Many of our systems and components reflect cutting-edge technology incorporated from our unequaled variety of products and services.



Broad avionics compatibility and certifications for almost any turboprop or piston aircraft mean streamlined installation, the shortest downtime, and fewer engineering modifications for significant cost savings—and less time out of service—to maximize your return on investment.



Using a smart cable, updating the terrain database on-wing is fast and virtually foolproof—reducing aircraft downtime and saving inventory and shipping costs to send a unit to the factory for updating. The cable also makes it easy to update the system software or download flight history data.

**Proven. Safer. Better.**

Fly with confidence, knowing you've partnered with the very best. As the worldwide flight-safety leader, Honeywell delivers the demonstrated value and performance, unmatched industry experience, and superior customer service you can depend on.

**Worldwide support.**

With the most extensive and capable sales offices, field service engineers, distribution centers, repair and overhaul centers, and more than 800 installation service centers positioned around the globe—from the Americas to Europe, across the Middle East and Africa, and throughout the Asia-Pacific region—Honeywell is the worldwide force that keeps your fleet in the air 24/7/365.

**The Honeywell advantage.**

As part of a \$30 billion multinational high-technology products and services company, Honeywell Aerospace draws upon a depth of knowledge, experience, and resources unmatched in the industry. We are a global leader in integrated avionics, engines, systems, and service solutions for aircraft manufacturers, airlines, business and general aviation, military, helicopters, space, and airport operations.

**Find out more**

To learn more about the EGPWS family of products, visit us on-line at [www.honeywell.com/egpws](http://www.honeywell.com/egpws)

**Honeywell Aerospace**

Air Transport and Regional  
1944 E. Sky Harbor Circle  
Phoenix, AZ 85034  
US Toll Free: 800-601-3099  
International: 602-365-3099  
[www.honeywell.com](http://www.honeywell.com)

N61-0440-003-001  
October 2006  
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