

ST3400H HeliTAWs®



ST3400H HeliTAWs® is the industry's first multihazard avoidance system for helicopters that alerts against wires, terrain, and obstacles, utilizing WireWatch®—advance defense against wire strikes. It further enhances the operational awareness in the cockpit by helping helicopter pilots avoid transmission lines whether they are powered on or off.

Incorporating proprietary TruAlert® technology, HeliTAWs enables pilots to take off, cruise, hover and land at off-airport locations without triggering nuisance alerts. Exceeding the TSO-C194 compliance, HeliTAWs includes an easy-to-interpret, color, high-resolution display for 3D terrain, obstacles, flight plan, traffic overlay, ADS-B in, Radalt Decent Altitude Callouts along with MIL-STD-3009 On-Demand NVIS compatibility.

The ST3400H Incorporates automatic or manual engagement of Offshore HTAWS modes per RTCA/DO-376, improving safety margins for offshore helicopter operations.

NIGHTHAWK
FLIGHT SYSTEMS, INC.

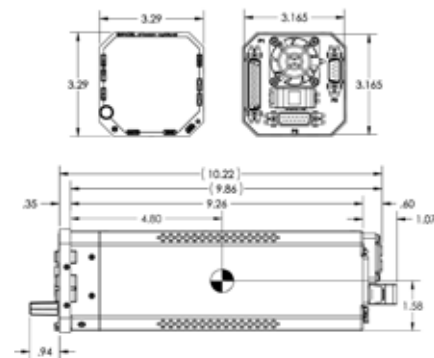
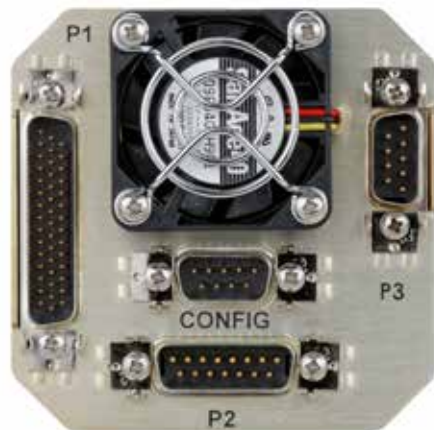


Fly Safe.

ST3400H HeliTAWs®

CFIT and wire strikes are a big problem with a simple solution — HeliTAWs®.

Only HeliTAWs® has WireWatch®, our exclusive database system for transmission lines, and TruAlert®, that eliminates annoying false alarms from cruise right on down to the ground.



FLTA - Forward Looking Terrain Avoidance
 RTC - Reduced Required Terrain Clearance
 ITI - Imminent Terrain Impact

Dimensions and specifications subject to change without notice.

- Display** LCD projection engine; LED-Backlight
- Daylight Mode** Sunlight Readable
- NVIS Mode** Class B compatible per MIL-STD-3009 (optional)
- Weight** 2.7 lb (1.2 kg)
- Dimensions** Body: 9.86 in deep (25.04 cm) from rear of bezel (excluding Positronics 'D' connectors)
 Body: 3.165 in wide x 3.165 in tall (8.04 cm x 8.04 cm)
 Bezel: 3.285 in wide x 3.285 in tall (8.34 cm x 8.34 cm)
- Power Requirements** 22-33 VDC, 40 watts maximum
- Cooling Requirements** Internal fan, forced air not required
- Operating Environment** -20 °C to +70 °C
 +55,000 ft max altitude
- Mounting** Standard 3-ATI with clamp
- Certification Basis** TSO C194 Helicopter Terrain Awareness and Warning System
 TSO C113 Airborne Multipurpose Electronic Displays
 TSO C87 Airborne Low-range Radio Altimeter
 TSO C118 TCAS 1
 TSO C195b ADS-B In Traffic
 RTCA/DO-376 Offshore HTAWS
 RTCA/DO-178B Software Level C
 RTCA/DO-254 Hardware Level C
 RTCA/DO-160F Env. Cat: [A3F1Z]BBB[UU2]XXXXXXZZAZ[ZW][WW]M[A3G33]XXAX
- Warranty** 2 years
- Databases** Terrain: 3 arc-second horizontal resolution (300 ft. grid), 1 foot vertical resolution
 Obstacle: Gridless, 1 foot vertical resolution
 Airports
 Transmission Lines: Optional. Contact Sandel for region availability.
- Required Input**
GPS ARINC 429 or RS-232 (TSO C145 or C146 receiver required)
- Optional Inputs**
Heading ARINC 429 or XYZ Synchro (installation option: for enhanced display features)
VOR/Localizer ARINC 429 or Low-level analog (installation option: for GPWS ILS alerting)
Glide Slope ARINC 429 or Low-level analog (installation option: for GPWS ILS alerting)
Radar Altimeter ARINC 429 or Analog (installation option: required for GPWS alerting)
Air Data Computer ARINC 429 or Analog (installation option: improves altitude accuracy)
Traffic ARINC 429/RS-422 (installation option: for traffic display overlay)
- Outputs**
Audio 500 ohm 25/150mw line-level and 4-8 ohm speaker
Discretes GND Discretes for Caution, Warning, TAWS Inhibit, Mute, Sensitivity/Off-Airport, Radalt MINS, Glide Slope Override, Offshore Inhibit (Auto-Rotate).
- Discrete Inputs** Remote Sensitivity/TAWS Inhibit, Mute, Glide Slope Override, NVIS, Gear Input and Back Course.
- Display Features**
Map Display High-resolution map depicting GPS flight plan, terrain, Point Obstacles and Power line Wires, airports, and traffic.
Terrain Display Modes Map ranges from 0.5nm to 20nm full scale
 Relative Mode (REL): Terrain color coded relative to current helicopter altitude
 Topographic Mode (TOPO): Terrain shown in topographic color coding
 Digital radar altitude. Pilot adjustable MINS setting. Aural Altitude Callouts.
- Radar Altimeter Display**
- Alerting Modes**
TAWS Terrain, Obstacle, and Wire FLTA and RRTC
 Terrain and Obstacle ITI
GPWS Mode 1: Excessive Rate of Descent
 Mode 3: Altitude Loss After Takeoff or Missed Approach
 Mode 3a/3b: Loss of Altitude/Air Speed During Takeoff or Missed Approach
 Mode 4: Flight into Terrain When Not in Landing Configuration
 Mode 4a/4b: Flight into Terrain When Not In/In Landing Configuration
 Mode 5: Excessive Downward Glide Slope Deviation
 Mode 6: Altitude Callouts