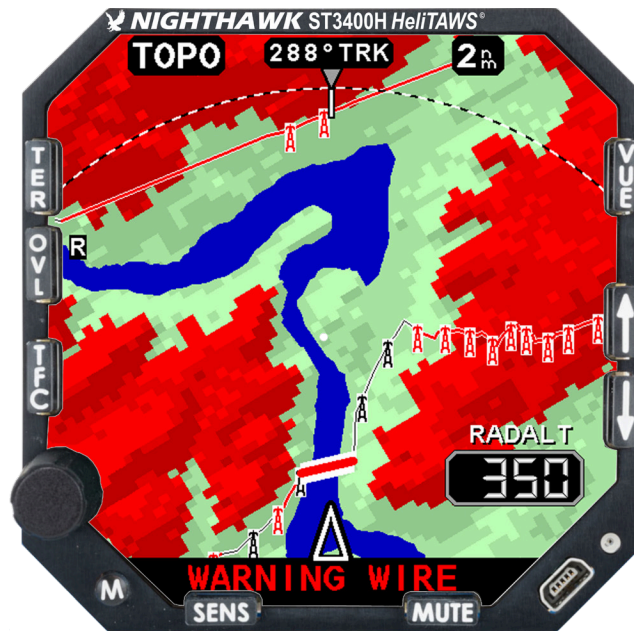


ST3400H HeliTAWs®



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.

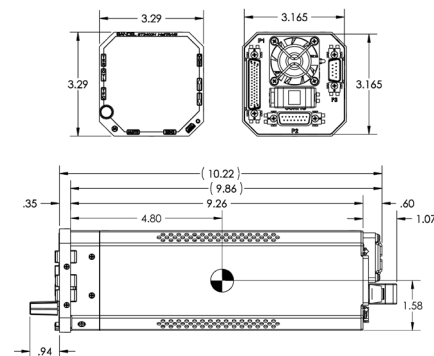
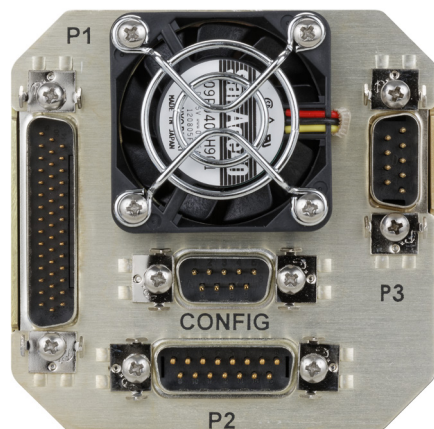


Fly Safe.

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 GPWS
 RTC - Reduced Required Terrain Clearance
 ITI - Imminent Terrain Impact

Dimensions and specifications subject to change without notice.

Display	LCD projection engine; LED-Backlight
Active Display Area	8.2532 in ²
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 Nighthawk 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 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 Landing Configuration Mode 5: Excessive Downward Glide Slope Deviation