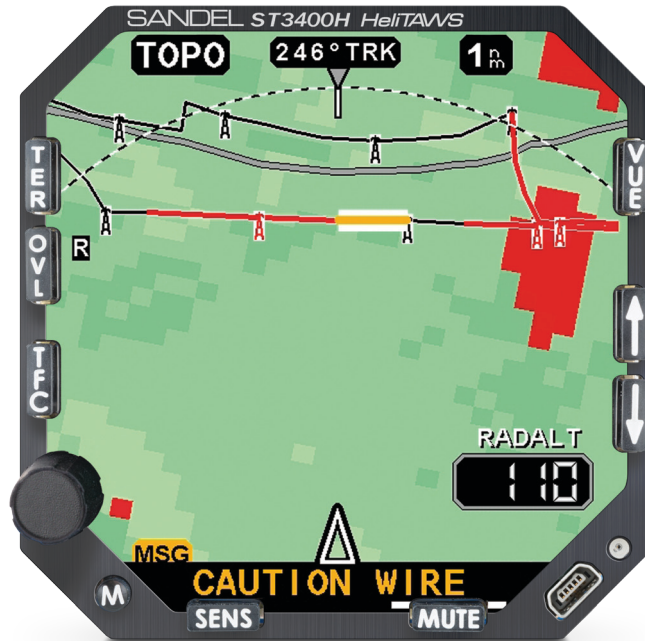


ST3400H HeliTAWS



Sandel 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 Sandel's 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, TAS/TCAS display interface, Radalt Decent Altitude Callouts along with MIL-STD-3009 On-Demand NVIS compatibility.

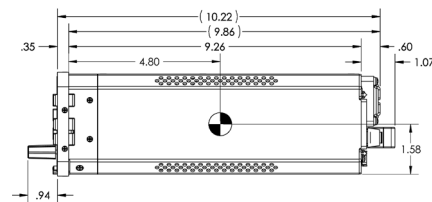
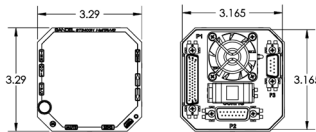
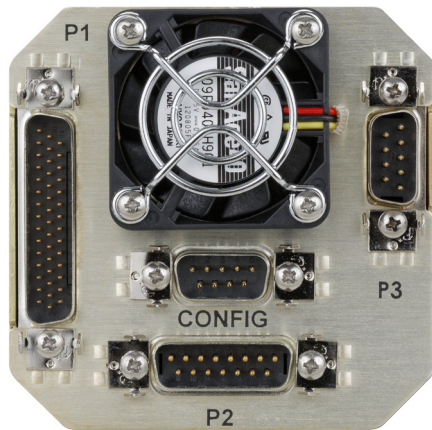
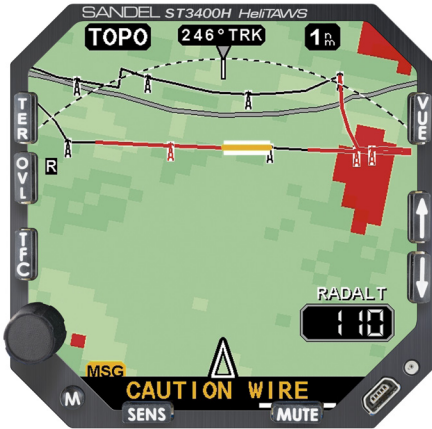
See what's next

SANDEL.

ST3400H HeliTAWs

CFIT and wire strikes are a big problem. Sandel has a simple solution — HeliTAWs.

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



Dimensions and specifications subject to change without notice.

Display	Sandel 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
- 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: 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 (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

Discrete Inputs Remote Sensitivity/TAWs Inhibit, Mute, Glide Slope Override, NVIS

Display Features

- Map Display High-resolution map depicting GPS flight plan, terrain, obstacles, 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

Radar Altimeter Display

- Topographic Mode (TOPO): Terrain shown in topographic color coding
- Digital radar altitude. Pilot adjustable MINS setting

Alerting Modes

- TAWs Forward Looking Terrain Avoidance
- GPWS Mode 1: Excessive Rate of Descent
- Mode 3: Altitude Loss After Takeoff or Missed Approach
- Mode 4: Flight Into Terrain When Not in Landing Configuration
- Mode 5: Excessive Downward Glide Slope Deviation
- Mode 6: Altitude Callouts

See what's next

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