

Overview

skyBeacon is a 2020 compliant, near zero-install, Class B1S ADS-B UAT transmitter and WAAS GPS integrated into a wing tip position light. The power transcoder decodes replies from legacy transponders. skyBeacon is 14 CFR §91.227 compliant and smart phone configurable over Wi-Fi.



Features

UAT Transmitter

- Certified to TSO-154c Class B1S. RTCA DO-282B Class B1S

Position Light

- Certified to TSO-C30c Type I

WAAS GPS

- Certified to TSO-C145d Class Beta 1
- Integrated RAIM processor for Security and Integrity protection
- SBAS corrections and health messages used to detect and correct satellite range errors
- Satellite pseudo range step errors detected and excluded
- SBAS fast and long-term corrections applied

Power Transcoder

- Decodes altitude and squawk via aircraft electrical system

Altitude Encoder

- Static pressure sensor and encoder

Certification

- TSO-C154c, TSO-C145d, TSO-C30c, TSO-C88b

Patents

<https://www.uavionix.com/patents>

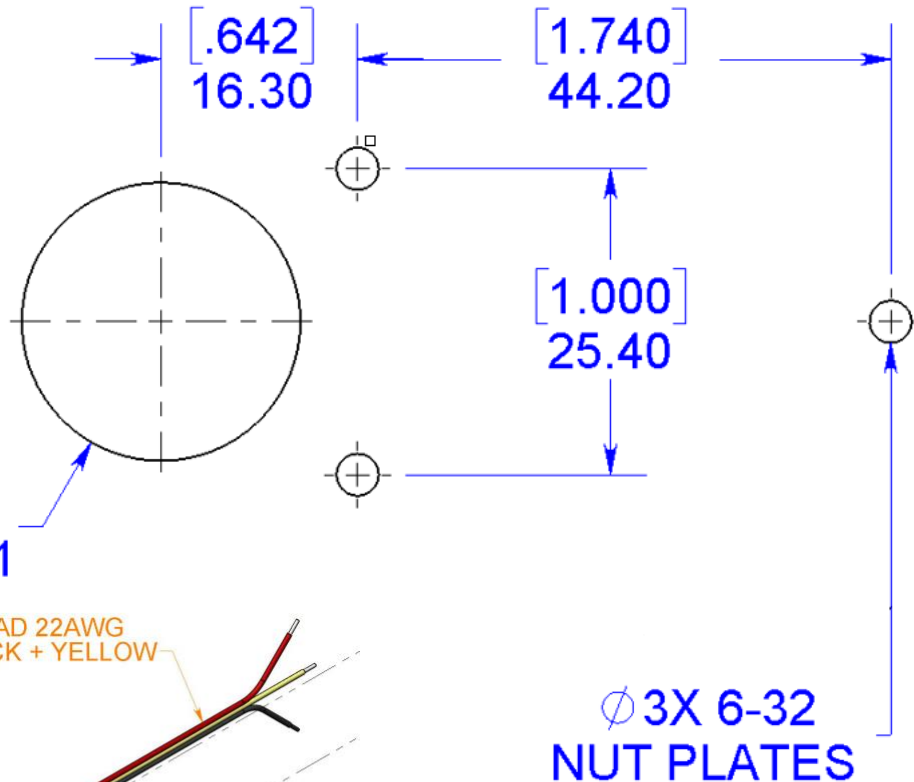
Regulatory

- FCC ID 2AFFTUAT016R
- ADS-B Out: §91.225, §91.227, AC 20-165B
- GNSS Position: AC 20-165B
- Position Light: SAE/AS8037

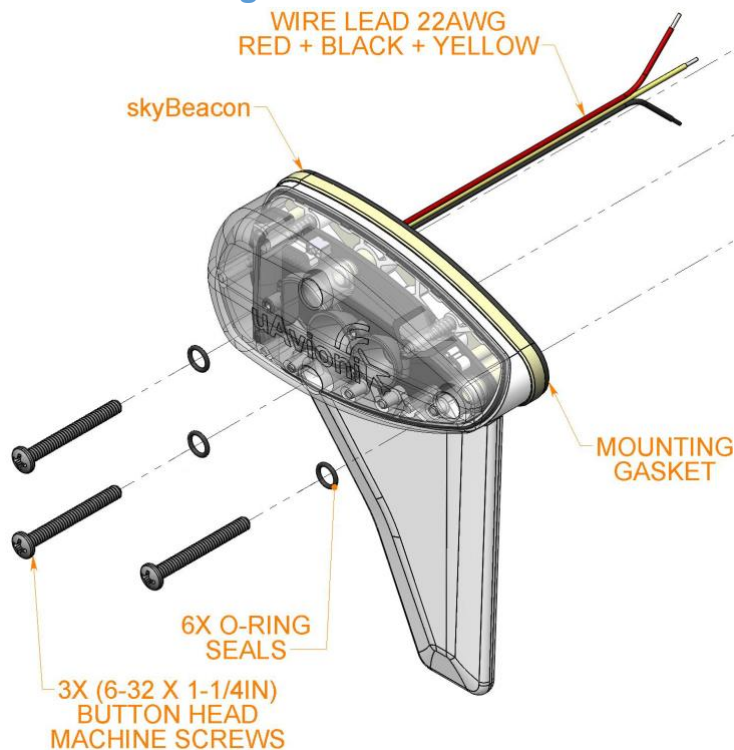
Technical Specifications

Specification	Value
Input Voltage	11-31V DC
Operating Power	3 watts
Size	124x116x48mm
Weight	90 grams
SDA/SIL	2/3
Operating Temp	-45 to 80°C
978MHz UAT Transmitter	
Power Classification	DO-282B Medium Power
WAAS GPS	
Tracking	-166dBm
Reacquisition	-160dBm
Cold Start	-148dBm
LED Position Light	
Color	Aviation Red
Intensity	40 candelas
Wi-Fi Configuration	
Physical	802.11b/g/n
App Compatibility	iOS, Android
Power Transcoder	
Decodes Mode A and C via DC input	

Mounting Dimensions



Installation Diagram



Wiring Considerations

Connect the red wire to the switched power wire.

Connecting the black wire to the aircraft structure should be suitable but it may be necessary to connect the black wire to the battery ground in some cases.

Connect the yellow wire to the strobe switch. The strobe power supply must be bypassed for the skyBeacon. Connecting skyBeacon to the strobe power supply will damage the device.

uAvionix products are warranted to be free from defects in material and workmanship for one year from the of installation in the aircraft. For the duration of the warranty period, uAvionix, at its sole option, will repair or replace any product which fails in normal use. Such repairs or replacement will be made at no charge to the customer for parts or labor, provided that the customer shall be responsible for any transportation cost.