Overview

PingNav is the world's smallest, lightest and most affordable ADS-B out compliant navigation source. Combined with the Ping2020 or Ping1090 transceiver this provides a complete UAT in/out, 1090ES in ADS-B solution for operations below FL18,000ft.

Features

- Supports all satellite augmentation systems.
- GPS/QZSS, GLONASS, Galileo concurrent GNSS.
- Battery backup for fast FTTF.
- Directly connects to Ping2020 transceiver.
- Dual boundary layer static pressure ports.
- UTC timing output for UAT ADS-B medium synchronization.
- Designed to meet DO-229D MOPs
- Security and Integrity Protection
- Advanced jamming and spoofing detection.
- Uses SBAS corrections and health messages to detect and correct satellite range errors.
- Satellite pseudo-range step errors detected and excluded.
- SBAS fast and long term corrections applied.

Regulatory

- Designed to meet the ADS-B requirements for operation below FL18,000'

Technical Specifications

Specification	Value
Input Power	5V 500mW
Size	42x22mm
Weight	30grams
Receiver	
Sensitivity	-167dBm
Pressure Altimeter	18Kft, 10cm resolution
NACp	7 – EPU < 0.1NM
NACv	1 - < 10m/s
SDA	1 - < 1E-3
SIL	1 - < 1E-3
NIC	7 – < 0.2NM
NICbaro	0 – Not Crosschecked
Supported Interfaces	
UTCtic	1pps
UART	115200 Baud

Quality Standards and Procedures

Designed and assembled in the USA, HALT and HASS tested, IPC-610 class II soldering, production functional testing. Software D.A. to DO-178B, Hardware D.A. to DO-252 Class C.

PingNav ADS-B Navigation Source

_____

Electrical Specification

<table>
<tr><td colspan="3">Navigation Source Interface</td></tr>
<tr><td>Pin</td><td>Type</td><td></td></tr>
<tr><td>1</td><td>Output</td><td>UTC</td></tr>
<tr><td>2</td><td>Output</td><td>TXD</td></tr>
<tr><td>3</td><td>Input</td><td>RXD</td></tr>
<tr><td>4</td><td>Power</td><td>5V</td></tr>
<tr><td>5</td><td>Ground</td><td>Ground</td></tr>
</table>

Mating Connector: JST ZHR-5
Pins: SZH-002T-P0.5

	Indicators	
LED	**ON**	**FLASHING**
Red	3DFix >= 3	

Mechanical Specification

_____