

# AVIDYNE<sup>®</sup> HELIOS<sup>™</sup>

## Next Generation Flight Management System



Avidyne Helios is a new multifunction SBAS flight management system that sets a new standard for integration in rotorcraft category navigation systems. Designed for the rigorous demands of corporate, military and special-mission helicopters, Avidyne Helios FMS provides full Required Navigation Performance (RNP) and Area Navigation (RNAV) capability, including Localizer Performance with Vertical (LPV), Lateral Navigation/ Vertical Navigation (LNAV/VNAV), LNAV-Only, and Approach Procedures with Vertical (APV) approach modes.

Avidyne Helios provides integrated standard and optional features never before available in a console (dzus) mount navigator, including:

- **Hybrid touchscreen with traditional knobs and buttons**
- **Moving map with extensive airspace, terrain, navaid, and airport display capability**
- **Display of XM or ADS-B weather with full graphics as an overlay on the map**
- **Traffic display from TCAS, TAS, or ADS-B**
- **Geo-referenced Jeppesen<sup>®</sup> Approach Plates and Airport Diagrams, including Heliports**
- **WiFi Integration with ForeFlight<sup>®</sup> and a host of other EFBs**
- **Optional integrated VHF Com, VOR, localizer and glideslope radio**
- **Optional RS-170 video display**
- **Optional integrated H-TAWS**
- **Optional radar display**



# Avidyne Helios - A new way to look at Flight Management

## The Next Generation Of Flight Management Systems

Avidyne Helios, the next-generation in flight management systems, incorporates significant technology advancements over anything else currently available. From its full QWERTY-style dedicated keyboard to its hybrid touchscreen 'Page & Tab' user interface, flight planning has never been easier. Its shallow menu structure gives pilots access to any screen in the system in only one or two button pushes, dramatically reducing heads down time. Unlike traditional text-only FMS displays, Avidyne Helios provides a large, full-color moving map display with pilot-selectable overlays of NAVAIDS, Intersections, Airways, plus ADS-B or on-board weather and traffic.



- Hybrid touch with "Page & Tab" user interface
- Fuel range ring reserve set for 20min
- Large, full color moving map
- Familiar QWERTY Keyboard
- NVIS Compatible



## Wireless Connectivity

All Avidyne Helios systems include integrated WiFi and Bluetooth® connectivity. Numerous tablet application developers support the Avidyne Helios wireless protocol. Foreflight® and many other apps are capable of receiving GPS position, ADS-B weather and traffic, XM Weather, and other data from the Helios system. Integrated wireless connectivity allows pilots to transfer flight plans from tablet Apps including ForeFlight®. Imagine being able to plan a flight, file a flight plan, get a clearance, and transfer the flight plan to your FMS, seamlessly. And all Helios systems have a built-in USB charger so you can insure your devices have adequate battery levels.

- Integrated WiFi/Bluetooth® connectivity
- Supports numerous tablet applications
- Built in USB charger

## VHF NAV/COM

The Avidyne Helios provides an optional integrated VHF communication and navigation radio in the same small enclosure. VHF communication capability provides a powerful 16-watt transceiver with frequency nomination and station identification. It also includes the ability to monitor the standby channel at the same time as the active channel. The integrated VHF navigation system provides VOR navigation, as well as localizer and glide slope approach capability, which is fully integrated and automated with the FMS. It automatically decodes the identification of VORs and localizers, and insures that the proper frequency is tuned as part of the automated approach process.

- Powerful 16-watt transceiver with frequency nomination and station identification
- Monitor stand-by channel while monitoring active channel
- Provides VOR navigation, localizer and glideslope approach capabilities
- COMM presets with remote Channel Increment/Decrement and XFER



# Electronic Approach Charts & Airport Diagrams

Avidyne Helios' innovative implementation of Jeppesen's® chart services displays electronic terminal and approach charts and airport diagrams and includes a geo-referenced overlay of ownship present position and current flight plan. With one-button access to the worldwide library of Jeppesen electronic charts and airport diagrams, Avidyne Helios dramatically reduces the pilot workload and enhances situational awareness. Charts databases are quickly and easily updateable via the USB port on the Helios bezel using virtually any standard USB memory stick.

- Single button access to charts and airport diagrams
- Support for Helipads & Helicopter SID/STAR/Approaches
- Update charts and diagrams easily via USB port
- Reduces pilot workload



## Exclusive Avidyne GLAS™ Functionality

Avidyne GPS Legacy Avionics Support (GLAS) provides a direct interface to legacy Collins Proline 21 and Honeywell Primus EFIS systems for vertical guidance during approach operations. The unique integration capability enables EFISs certified before the availability of LPV approaches to have coupled approach guidance on these and other SBAS approaches.



## Flight Planning Made Easy

Entering and editing Flight Plans has never been easier than with the Avidyne Helios. It features easy-to-use flight planning with easy airway navigation, Avidyne's exclusive GeoFill™ waypoint nomination, and full autopilot integration.

Easy clearance-language flight plan entry, including SIDS and STARS, Procedure Previews, one-touch Holds, and rubberband flight plan editing, reduce workload and heads-down time. Avidyne Helios can store up to 99 flight plans of 128 waypoints each for quick access, and up to 1,0000 LAT/LON and Rho/Theta-defined User Waypoints.

Its cross-fill capability seamlessly automates the process of synchronizing flight plans in dual-FMS installations.

- Easy airway navigation
- Avidyne's GeoFill® waypoint nomination
- Store up to 99 flight plans and 128 waypoints for quick access

## WX Radar

Optional interface for BendixKing RDR2000-series digital radar systems, including support for Vertical Profile™, and can replace legacy radar indicators or act as a repeater display with certain EFIS systems for added redundancy.



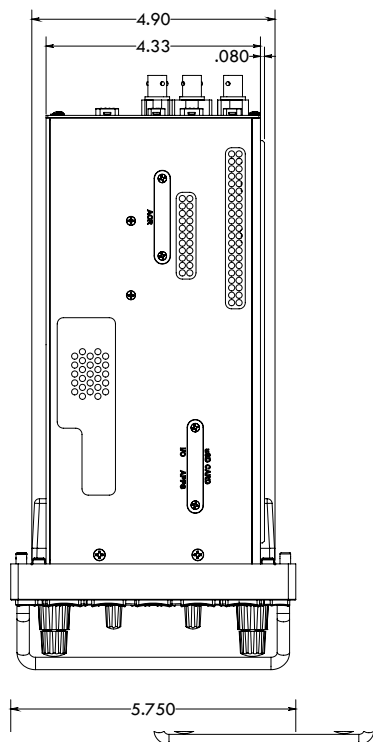
## Video

Options include the ability to display RS-170 video using any compatible camera or video source.





# Avidyne Helios - The Right Fit



## Specifications

### Display

- 5.7" Diagonal w/ touchscreen
- Full VGA - 640x480 pixels
- 65,535 colors
- Ultrabright sunlight readable w/ LED backlighting

### Power Requirements

- 11 - 33VDC at 2.2A  
(4.0A XMIT at 28VDC)

### Environmental

- DO 160E
- To 50,000 ft.
- -20C to +55C Operating
- +70C Short Term

### Cooling

- No external forced air cooling required

### Warranty

- 2 or 4 year warranty
- AeroPlan™ extended warranty available

### I/O

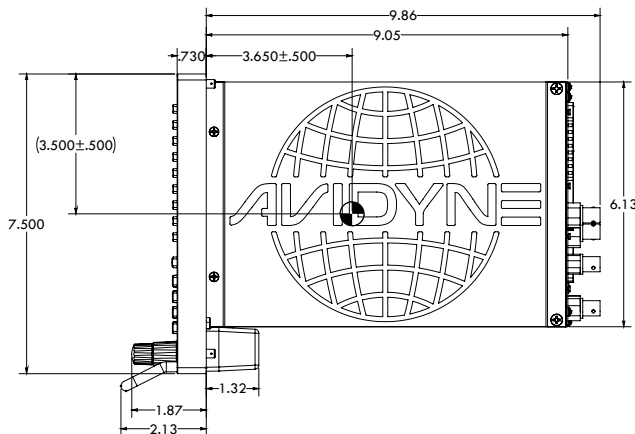
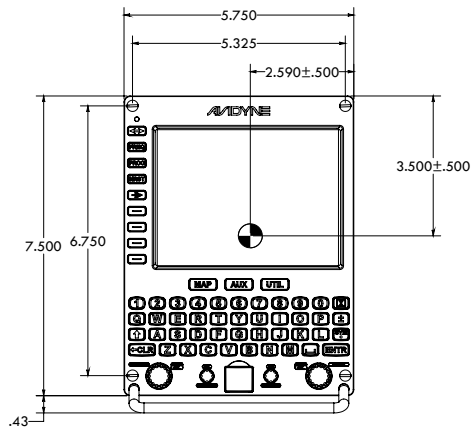
See website for complete list of Interfaces. [www.avidyne.com](http://www.avidyne.com)

### GPS

- 16-Channel GPS/SBAS Receivers
- RTCA DO-178B and DO-254 Level B,
- RTCA DO-160E
- Meets DO-229D, Beta Class 3
- Accuracy:
  - Autonomous Position
    - 3 meters (CEP 50%)
    - 5 meters (95%)
  - SBAS Differential Position
    - 1 meter (CEP)
    - 3 meters (95%)
  - Velocity Accuracy 0.1 knots (95%)
- Dynamics:
  - Acceleration : 10g max
  - Speed : 1,000 knots
  - Altitude : 50,000 ft

### Optional VHF & VOR/LOC

- 16 Watt transmitter (Class 3, 5)
- Simultaneous reception of two channels, voice or data
- 8.33KHZ or 25KHZ Operation (Class C, E)
- VOR - RTCA DO-196
- LOC - RTCA DO-196S
- UHF GS - RTCA DO-192



Designed to fit. Avidyne Helios packs all these capabilities in a standard dzus-mount design.

Dimensions		
Height	7.500"	190.50 mm
Width	5.750"	146.05 mm
Depth	9.885"	251.08 mm
Depth w connectors	11.900"	302.26 mm
Weight	8.50 lbs	3.855 kgs

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\* Features and options subject to change without notice.