helios-avionics.de

MADE BY PILOTS.
FOR PILOTS.

PRODUCTS FOR NON-CERTIFIED AIRCRAFT.

GENERAL AVIATION.
MADE EASY.

ABOUT US

We are a young and dynamic team of pilots who admire flying and are constantly pursuing the vision of making flying a pure, hassle-free joy.

As such, we aim at making the world of avionics more digital, user-friendly, and safe. Since we are FAA & EASA private pilots with instrument rating who love flying whenever possible, we can offer you first-hand products made by pilots for pilots. With our products, we not only provide you straightforward navigation but also enhanced situational awareness.

You then only need to focus on one thing that really matters – the fun of flying!

Wolfgang Wendnagel
Chief Technology Officer

Max Dirlewanger
Chief Financial Officer

Martin Wendnagel
Chief Executive Officer

Schröder Industry
Sales Partner

Elmarx Aviation Inc.
Sales Partner

HHS BASIC

PFD/MFD:

- 10-inch Touchscreen
- Sunlight Readable
- 4G Modem, Wifi, Ethernet
- GPS/GNSS (Multi-GNSS: Waas, Egnos, etc.)
- Power Input: 9-36V, ~12W

Basic SensorBox:

- Engine Data (via CAN bus or analog input)
- Pitot Static Tubes (Indicated Airspeed, Altitude)
- Current Sensor, 3x Impulse Counter, 2xCAN, 2xRS232, 11x Universal Analog Inputs, 8x Thermocouples (can be extended)

Basic Glass Cockpit Software:

- 2D Moving Map with VFR Chart Data (Airports, Airspaces, Traffic Patterns, Frequencies, Obstacles, Terrain, Lakes, Rivers, Highways, Cities, etc.)
- Profile View ("side" view of route with terrain and airspaces, etc.)
- Flight Planning
- Visualization of Engine Data and Pitot Static Data
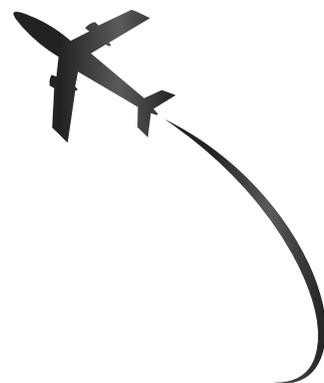
Power requirements:
SensorBox: 7W (~0.6A @ 12V)
PFD: 12W (~0.9A @ 12V)
Weight: SensorBox: ~0.7kg (1.5lb), PFD: ~1.5kg (3.3lb)
Dimensions PFD: 249mm x 166mm
Dimensions SensorBox: 120mm x 103mm x 56mm

HHS ADVANCED

1. HHS Basic (PFD/MFD, Basic SensorBox, Basic Glass Cockpit Software)

+

2. Advanced SensorBox

- Backup GPS/GNSS (Multi-GNSS: Waas, Egnos, etc.)
- Software-Defined-Radios:*
- ADS-B in (1090 MHz, 978 MHz)
- ILS Reception (Localizer, Glideslope)

+

3. Backup Battery Management

+

4. Advanced Glass Cockpit Software:

- Basic Glass Cockpit Software Features

+

- AHRS, 3D Synthetic Vision (incl. Tunnel in the Sky / Approach Procedures)
- Flight Recordings & Forwarding
- Weather
- Logbook
- Flightplan Synchronization
- Custom Waypoints
- Checklists
- Taxiways, IFR Chart Data
- 3rd Party Device Compatibility
- And much more: https://helios-avionics.de/features/

Power requirements:
SensorBox: 7W (~0.6A @ 12V),
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Dimensions PFD: 249mm x 166mm
Dimensions SensorBox: 120mm x 103mm x 56mm

*the item is individually configurable

HHS PRO

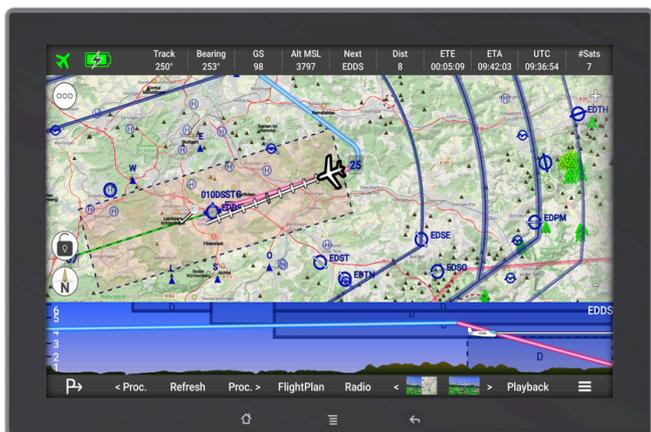**1. HHS Advanced (PFD/MFD, Advanced SensorBox, Advanced Glass Cockpit Software)**

      +

2. Hardware Buttons / Rotary Encoders for PFD/MFD*

      +

3. Professional SensorBox (with additional features)

- Advanced SensorBox

      +

- FLARM In & Out*
- Dedicated ADS-B in (1090 MHz)*
- OAT Probe (Outside Air Temperature)
- True Airspeed Indication
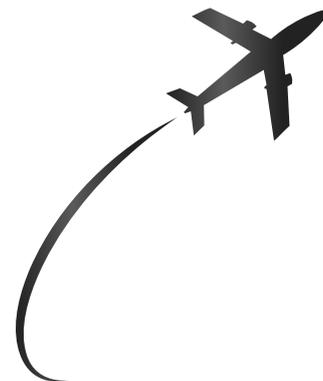

Power requirements:
SensorBox: 7W (~0.6A @ 12V),
PFD: 12W (~0.9A @ 12V)
Weight: SensorBox: ~0.7kg (1.5lb), PFD: ~1.5kg (3.3lb)
Dimensions PFD: 249mm x 166mm
Dimensions SensorBox: 120mm x 103mm x 56mm

*the item is individually configurable

COMPONENTS

10-inch PFD / MFD (w/ Basic Glass Cockpit SW)

- 10" PFD/MFD,
- Basic Glass Cockpit Software: 2D Moving Map with VFR chart data (Airports, Airspaces, Traffic Patterns, Frequencies, Obstacles, Terrain, Navaids, Fixes, etc...), Profile View ("side" view of route with terrain and airspaces, etc.), Flight Planning, Visualization of engine/air/external sensor data, Traffic indication (for the advanced glass cockpit software, an activation code can be purchased)

Hardware Buttons / Rotary Encoders

- Physical rotary encoders and buttons
- Simple usage especially during flight
- Can be used simultaneously to touchscreen based on the personal preferences

Advanced Glass Cockpit Software:

- Activation Code for activating additional features on top of the features of the Basic Glass Cockpit Software
- Basic Glass Cockpit Software Features
- AHRS, 3D Synthetic Vision (incl. Tunnel in the Sky / Approach Procedures)
- Flight Recordings & Forwarding
- Weather
- Logbook
- Flightplan Synchronization
- Custom Waypoints
- Checklists
- Taxiways, IFR Chart Data
- 3rd Party Device Compatibility
- And much more: https://helios-avionics.de/features/

External Magnetometer

- Magnetic or True Heading
- Avoiding Magnetic Interference

COMPONENTS

SensorBox Basic
- Engine Data (via CAN bus or analog input)
- Pitot Static Tubes (Indicated Airspeed, Altitude)
- Current Sensor, 3x Impulse Counter, 2xCAN, 2xRS232, 11x Universal Analog Inputs, 8x Thermocouples (can be extended)
- External HW buttons (e.g., joystick connectivity)

GNSS/GPS Module (built into SensorBox)
- Backup GPS/GNSS (Multi-GNSS, Waas, Egnos, etc.)

Software-Defined-Radio (SDR) Modules (built into SensorBox)
- 2 SDR Modules
- ADS-B @ 1090 MHz
- ADS-B UAT @ 978 MHz
- Or alternatively: ILS (Localizer, Glideslope)
- Traffic and ILS is displayed within the 3D Synthetic Vision and 2D Moving Map

FLARM Module (built into SensorBox)
- FLARM In & Out (receiving and transmitting signals)
- Includes GNSS/GPS Receiver (replaces GNSS/GPS Module)
- The traffic will be displayed within the 3D Synthetic Vision and on the 2D Moving Map

ADS-B Module (built into SensorBox)
- ADS-B @ 1090 MHz
- The traffic will be displayed within the 3D Synthetic Vision and on the 2D Moving Map

OAT Probe
- Outside Air Temperature Sensor for SensorBox (enables TAS indication)

Backup Battery Management
- Backup battery circuit (for LiFePo4 or Lead, 12V or 24V)
- Optional extra avionics switch
- 200V overvoltage protection, reverse polarity protection, deep discharge protection
- Integrated eFuse (DC In) and regular fuses (for backup battery)
- Ultra low quiescent current (typical 0.65 mA)

PURCHASE INQUIRY

COMPANY NAME		CONTACT INFORMATION	DELIVERY ADDRESS
CUSTOMER CODE			
TECHNICAL HELP DESIRED?			

Art. No.	Art. Name	Description	Order Amount
HHS.10.BI.BA	HHS Basic	Basic HHS Solution consisting of: 10" PFD/MFD, Basic SensorBox (w/ Engine Data & Pitot Static Tubes), Basic Glass Cockpit Software (2D Moving Map, Profile View, Flight Planning, Visualization of engine and pitot static data), External HW buttons (e.g., joystick connectivity)	
HHS.10.BI.BF	HHS Advanced	Basic HHS Solution + Advanced SensorBox (Backup GPS/GNSS (Multi-GNSS Waas, Egnos, etc.), Software-Defined-Radios (ADS-B in (1090 MHz, 978 MHz), ILS reception (Localizer, Glideslope)), Backup Battery, Advanced Glass Cockpit Software (AHRS, 3D Synthetic Vision, Tunnel in the Sky, Approaches, Flight Recordings & Forwarding, Weather, Logbook, Flightplan Synchronization, custom Waypoints, Checklists, Taxiways, IFR chart data, 3rd party device compatibility, and much more: https://helios-avionics.de/features/	
HHS.10.BI.BU	HHS Pro	Advanced HHS Solution + Hardware Buttons / Rotary Encoders for PFD/MFD + Professional SensorBox (FLARM in & out, Extra dedicated ADS-B in (1090 MHz), OAT probe (outside air temperature)	
P10.B1.0	PFD/MFD (10", Basic Glass Cockpit Software)	10" PFD/MFD, Basic Glass Cockpit Software includes: 2D Moving Map with VFR chart data (Airports, Airspaces, Traffic Patterns, Frequencies, Obstacles, Terrain, Navaids, Fixes, etc...), Profile View ("side" view of route with terrain and airspaces, etc.), Flight Planning, Visualization of engine/air/external sensor data, Traffic indication, highly customizable For the advanced glass cockpit software, an activation code is needed (can be purchased)	
SB.E1.R0	SensorBox Basic	SensorBox with Engine Data (via CAN bus or analog input) and Pitot Static Tubes (for IAS, Altitude), Current Sensor, 3x Impulse Counter, 2xCAN, 2xRS232, 11x Universal Analog Inputs, 8x Thermocouples (can be extended)	
SB.E1.G1	GNSS/GPS Module	Backup GPS/GNSS (Multi-GNSS, Waas, Egnos, etc.) Built into SensorBox	
SB.E1.F1	FLARM Module	FLARM In & Out (receiving and transmitting signals) Includes GNSS/GPS Receiver The traffic will be displayed within the 3D Synthetic Vision and on the 2D Moving Map Built into SensorBox, replaces GNSS/GPS Module	
SB.E1.A1	ADS-B Module	ADS-B @ 1090 MHz The traffic will be displayed within the 3D Synthetic Vision and on the 2D Moving Map Built into SensorBox	
SB.E1.SDR1	Software Defined Radio Modules (2)	2 SDR Modules ADS-B @ 1090 MHz ADS-B UAT @ 978 MHz Or alternatively: ILS (Localizer, Glideslope) Traffic and ILS is displayed within the 3D Synthetic Vision and 2D Moving Map Built into SensorBox	

PURCHASE INQUIRY

Art. No.	Art. Name	Description	Order Amount
SB.E1.BB1	Backup Battery Management	Backup battery circuit (for LiFePo4 or Lead, 12V or 24V) Optional extra avionics switch 200V overvoltage protection, reverse polarity protection, deep discharge protection Integrated eFuse (DC In) and regular fuses (for backup battery) Ultra low quiescent current (typical 0.65 mA)	
P10.HW.B1	Hardware Buttons/Rotary Encoders	Physical rotary encoders and buttons Simple usage especially during turbulence. Can be used simultaneously to touchscreen based on the personal preferences	
SB.E1.OAT	OAT Probe	Outside Air Temperature Sensor for SensorBox	
SW.HR.ZN1	Activation Code for Advanced Glass Cockpit Software	Basic Software Features + AHRS, 3D Synthetic Vision (incl. Tunnel in the Sky / Approach Procedures), Flight Recordings & Forwarding, Weather, Logbook, Flightplan Synchronization, custom Waypoints, Checklists, Taxiways, IFR chart data, 3rd party device compatibility, and much more: https://helios-avionics.de/features/	
EM.HW.MG1	External Magnetometer	Magnetic or True Heading Avoiding Magnetic Interference	

PURCHASE NOW

Thank you for your interest in our products.
Please send your purchase inquiry to the following e-mail address:

info@schroeder-industry.de

We will be in touch with you soon!

helios-avionics.de

THANK YOU.

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