

1000 VFR PFD



The revolutionary Evolution 1000 VFR PFD is the most affordable, upgradable and easily installed Electronic Flight Instrument System (EFIS) available for general aviation today.

Key Features

- Consolidates traditional six-pack instrument information plus CDI into a single display
- Displays winds aloft, OAT, TAS and ground speed
- Navigation display with 360 Compass and ARC modes
- Flight plan overlay with legs, waypoints, curved flight paths¹, and nearby nav aids
- Integral Air Data Computer and Attitude Heading Reference System (ADAHRS)
- Built-in backup battery and emergency GPS
- Works with your panel's existing avionics
- The unique PFD design slides into existing panel cutouts

PFD Options

- Analog Converter Unit (ACU) connects to aircraft autopilot for GPS steering¹
- Evolution Hazard Awareness (EHA) provides weather, lightning and traffic hazards display^{2,3,4}
- Automatic Dependent Surveillance-Broadcast (ADS-B)⁵

PFD Upgrades

- VFR to PRO Software upgrade

¹ With compatible GPS navigators

² Requires ARINC 735A compatible traffic system.

³ Requires Aspen EWR50 Weather Receiver or equivalent.

⁴ Requires WX-500 or equivalent.

⁵ Requires ADS-B receiver.

Options

Improve flight safety and situational awareness with options and software feature upgrades.

- ➔ ACU
- ➔ ADS-B
- ➔ EHA

Analog Converter Unit – converts older analog signals and interfaces to the industry-standard digital ARINC 429 interface and enables connection to aircraft auto pilot for GPS steering functionality*

Automatic Dependent Surveillance-Broadcast – a range of receivers and transceivers to meet the pending ADS-B mandate (2020). Options enable ADS-B weather and traffic hazards to be overlaid on the Navigation Display.

Evolution Hazard Awareness (EHA) – enables weather, lightning and traffic hazards to be overlaid on the Navigation Display**

- Lightning Detection (Data Link Weather and Stormscope® WX-500)
- XM NEXRAD Weather Radar
- Traffic

Software Upgrades



VFR + Software Upgrade = PRO

Adds the necessary features for IFR approach/landing, including:

- Glide Slope
- Localizer
- Minimums (decision height)
- Flight Director
- Upgrades the CDI to an HSI in both 360 and ARC modes
- Dual bearing pointers



GENERAL SPECIFICATIONS

Overall Dimensions	3.5"W x 7.0"H x 4.15"D
Weight	2.9 lbs. with Mounting Bracket

OPERATIONAL SPECIFICATIONS

Operating Temperature	-20°C to +55°C
Storage Temperature	-55°C to +85°C
Max Un-Pressurized Operating Altitude	35,000 ft.
Max Pressurized Operating Altitude	55,000 ft.
Max Humidity	95% at 50°C
Input Voltage	+8 to +32 Volts DC
Max Current	2.4 Amps @ 28 VDC; 4.8 Amps @14 VDC
Internal Battery	Minimum Operating Time 30 Minutes

I/O SPECIFICATIONS

ARINC 429	5 Inputs; 1 Output
RS-232	5 Inputs; 3 Outputs
Pitot Static	Quick Connect

REVISED VFR CERTIFICATION SPECIFICATIONS

FAA and EASA Technical Standard Orders	TSO/ETSO, C2D, C3D, C4C, C6D, C8D, C10B, C106, C113
Supplemental Type Certificate (STC)	Approved Model List (AML)
Software	RTCA DO-178B Level C
Environmental	RTCA DO-160E

*If the optional ACU is part of the initial VFR installation (highly recommended), the PRO upgrade (IFR) is greatly simplified with only a software upgrade required (no need to open the aircraft a second time)
 **Requires compatible hazard awareness sensors to be installed and configured to the PFD.

The VFR PFD is IFR capable with limitations.



www.aspenavionics.com/vfr

The freedom to fly as high as your aspirations.

The revolutionary Evolution 1000 VFR PFD (Primary Flight Display) is the most affordable, upgradable and easily installed Electronic Flight Instrument System (EFIS) available for general aviation aircraft today.

Designed to replace traditional mechanical primary flight instruments, the VFR PFD increases situational awareness and safety in a flexible design that easily upgrades to meet your evolving flight needs.

For more information, please visit www.aspenavionics.com.



The innovative Evolution Series VFR PFD installs easily in existing six-pack panel holes, without adding heavy remote boxes and wiring.

Versatile PFD – consolidates traditional six-pack instrument information plus CDI into a single display with a backup battery and emergency GPS

Affordable – lowest price, full featured certified PFD for GA aircraft

Compatible – works with your panel's existing avionics

Simple Installation – the unique PFD design slides into existing panel cutouts

Options – include auto-pilot interface (gps steering), weather, traffic

Feature Upgrades – affordably add HSI, bearing pointer and IFR features with an easy software upgrade

Smart Investment – simultaneously increases aircraft value and situational awareness



The VFR PFD is IFR capable with limitations.

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EVOLUTION

FLIGHT DISPLAY

Comparison Guide

PFD Feature Comparison

Aspen offers three PFDs; PRO, VFR and Pilot. The PRO is full featured and meets the needs of IFR pilots. The VFR meets the needs of VFR pilots and upgrades to a PRO with software upgrades and an ACU. The Pilot is a VFR PFD with no feature upgrades or options.

	Model			
	Evolution 1000 PILOT PFD	Evolution 1000 VFR PFD	Evolution 1000 VFR PFD	Evolution 1000 PRO PFD
Software Option Set			VFR – PRO Upgrade	
Suggested Retail Price	\$6,180	\$4,995	\$4,690	\$10,187
ACU Option	NA	\$1,000		STANDARD
Suggested Retail Price with ACU	NA	\$5,995		\$10,187
AHRS				
Integral Air Data Computer and Attitude Heading Reference System	•	•	•	•
DISPLAY FUNCTIONALITY				
PRIMARY ATTITUDE & AIR DATA DISPLAY				
Attitude Director Indicator (ADI)				
Attitude Display	•	•	•	•
Aircraft Reference Symbol	•	•	•	•
Single-Cue Flight Director Command Bars (external FD)			•	•
Slip/Skid Indicator	•	•	•	•
Vertical Deviation Indicator (VDI)			•	•
Lateral Deviation Indicator (LDI)			•	•
Airspeed Tape and Reference				
IAS Tape Display (knots or MPH)	•	•	•	•
Target Airspeed Field	•	•	•	•
Airspeed Bug	•	•	•	•
V-Speeds, Pilot Configurable (show/hide)	•	•	•	•
IAS Numeric Display	•	•	•	•
Airspeed Color Bands	•	•	•	•
Altitude Tape and Alarmer				
Altitude Tape Display	•	•	•	•
Selected Altitude Field (controls alt bug)	•	•	•	•
Selected Altitude Level-Off Tone Alert			•	•
Altitude Numeric Display	•	•	•	•
Altitude Trend Vector	•	•	•	•
Altitude Bug	•	•	•	•
Decision Height Annunciation			•	•
Selected Minimums Field			•	•
Selected Minimums Alerting Tone			•	•
Radio Altitude			ACU2 required	ACU2 required
Automatic Direction Finder (ADF)			ACU2 required	ACU2 required
Heading Synchro			ACU2 required	ACU2 required
Minimums Marker			•	•
LDI/CDI Navigation Source Annunciation		•	•	•
Vertical Speed Indicator (VSI)				
Vertical Speed Numeric Display	•	•	•	•
Vertical Speed Tape Display	•	•	•	•
Air Data Bar Preset (factory default)				
True Airspeed (TAS)	•	•	•	•
Baro Setting and Display	•	•	•	•
Wind Direction Degrees, Wind Speed	•	•	•	•
Wind Direction Arrow	•	•	•	•
Outside Air Temperature	•	•	•	•
GPS Ground Speed	•	•	•	•

PFD Feature Comparison

	Model			
	Evolution 1000 PILOT PFD	Evolution 1000 VFR PFD	Evolution 1000 VFR PFD VFR – PRO Upgrade	Evolution 1000 PRO PFD
Software Option Set				
PRIMARY NAVIGATION DISPLAY				
Navigation Display	•	•	•	•
Ownship Display	•	•	•	•
Direction Indicator Units	•	•	•	•
360 Compass	•	•	•	•
ARC Compass	•	•	•	•
Rate of Turn Indicator	•	•	•	•
Track Marker	•	•	•	•
Numerical Direction of Flight	•	•	•	•
Heading Bug Numerical Value Display	•	•	•	•
Heading Bug	•	•	•	•
GPS Flight Plan Map Views	•	•	•	•
Base Map (with flight plan legs, way points, curved flight paths with compatible GPS Navaid)	•	•	•	•
Course Deviation Indicator (CDI)				
Course Pointer		•	NA	NA
To/From Indicator		•	NA	NA
Selected Course Numerical Value Display		•	NA	NA
Course Deviation Scale		•	NA	NA
Course Deviation Indicator		•	NA	NA
Horizontal Situation Indicator (HSI)				
Course Pointer			•	•
To/From Indicator			•	•
Selected Course Numerical Value Display			•	•
Course Deviation Scale			•	•
Course Deviation Indicator			•	•
Single Line Bearing Pointer			•	•
Single Line Bearing Pointer Source			•	•
Single Line Bearing Pointer Information Block			•	•
Double Line Bearing Pointer			•	•
Double Line Bearing Pointer Source			•	•
Double Line Bearing Pointer Source Info Block			•	•
Selected Source Information Block		•	•	•

NextGen

SAFETY FEATURES				
Emergency & Backup				
Backup GPS Position	•	•	•	•
Internal Battery Backup Power (30 min.)	•	•	•	•
Backup Battery Charge Level/Time Remaining Display	•	•	•	•
OPTIONS				
VFR - PRO Software upgrade				
External Emergency Backup Battery				
EA 100 Pitch Roll Auto Pilot		•	•	•
ACU* Analog Converter Auto Pilot (enables GPS steering)		•	•	Standard
ACU2*		•	•	•
Evolution Hazard Awareness***		•	•	•
EWR50		•	•	•
Hazard Awareness Overlays				
Traffic (Requires ARINC 735A compatible traffic system)		•	•	•
XM Weather (Requires EWR 50 weather receiver)		•	•	•
WX-50 Stormscope Lightning Interface		•	•	•
ADS-B Weather and Traffic		•	•	•
Synthetic Vision			•	•

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