

ATTITUDE
BASED NEXT-
GENERATION
AUTOPILOT

STRAIGHT
& LEVEL
RECOVERY

2-AXIS
OR 3-AXIS
OPTIONS

ENVELOPE
PROTECTION
& ALERTING



S-TEC 3100 Digital Flight Control System

The most advanced autopilot for the most types of single- and twin-engine aircraft.

S-TEC 3100 Digital Flight Control System

The right capabilities. Right when you need them.

It's been a long day and you're nearing the end of your flight home. It's getting dark. The weather is closing in – fast. Approach control is firing directions at you faster than you can copy them down. This is single-pilot IFR at it's most difficult...for other pilots.



Fortunately, you have a very capable “copilot” in the form of a next-generation Genesys Aerosystems S-TEC 3100 Digital Flight Control System (DFCS).

The S-TEC 3100 is a fully featured, attitude-based autopilot that gives you a list of workload-reducing and safety-enhancing capabilities that were previously unavailable on aftermarket autopilots. The S-TEC 3100 DFCS's industry-leading features include:

Envelope Protection/Alerting

Loss of control is one of the largest contributors to general aviation accidents. The S-TEC 3100 DFCS helps minimize the chance of entering into an inadvertent stall, unusual attitude, over-speeds or excessive banking situation caused by aggressive autopilot inputs.

For example, should your aircraft approach a stall while the S-TEC 3100 is engaged, the system will automatically alter the maximum pitch angle necessary to quickly return the aircraft to a safe speed. In addition, visual and aural annunciations will alert you to the situation.

In situations where you encounter an over-speed or excessive banking, the system will apply similar corrective actions to mitigate these potentially hazardous situations.

Straight and Level Recovery

Should you inadvertently enter into an unusual attitude situation, the S-TEC 3100's Straight and Level button (LVL), delivers fast and simple automatic recovery to level flight from an unusual attitude no matter what the visibility. Once engaged, Straight and Level instantaneously overrides previous autopilot inputs to safely return and hold your aircraft at a neutral attitude while you get things sorted out.

Indicated Airspeed Hold

No matter what phase of flight you are in, Indicated Airspeed Hold (IAS) will reduce your workload. Set the power and trim and press the IAS button and the S-TEC 3100 will automatically hold the precise airspeed you select. This is especially useful when flying around busy airports where the tower asks you to keep your speed up or slow down to accommodate traffic.



Altitude Preselect

Whether you're departing or approaching the airport, between looking for traffic, talking to ATC and not busting an assigned altitude is one of the most stressful parts of flying. The S-TEC 3100's Altitude Preselect (ALT) feature can reduce your workload. It not only lets you preselect your desired altitude, it will give you both visual and aural alerts as you approach the setting or if you fly through it.



Works Very Well with Others

To ensure the easiest installation path possible, the next-generation S-TEC 3100 is designed with open architecture to integrate with a wide array of legacy analog avionics, as well as advanced digital sources and EFIS displays from Garmin, Aspen and others.

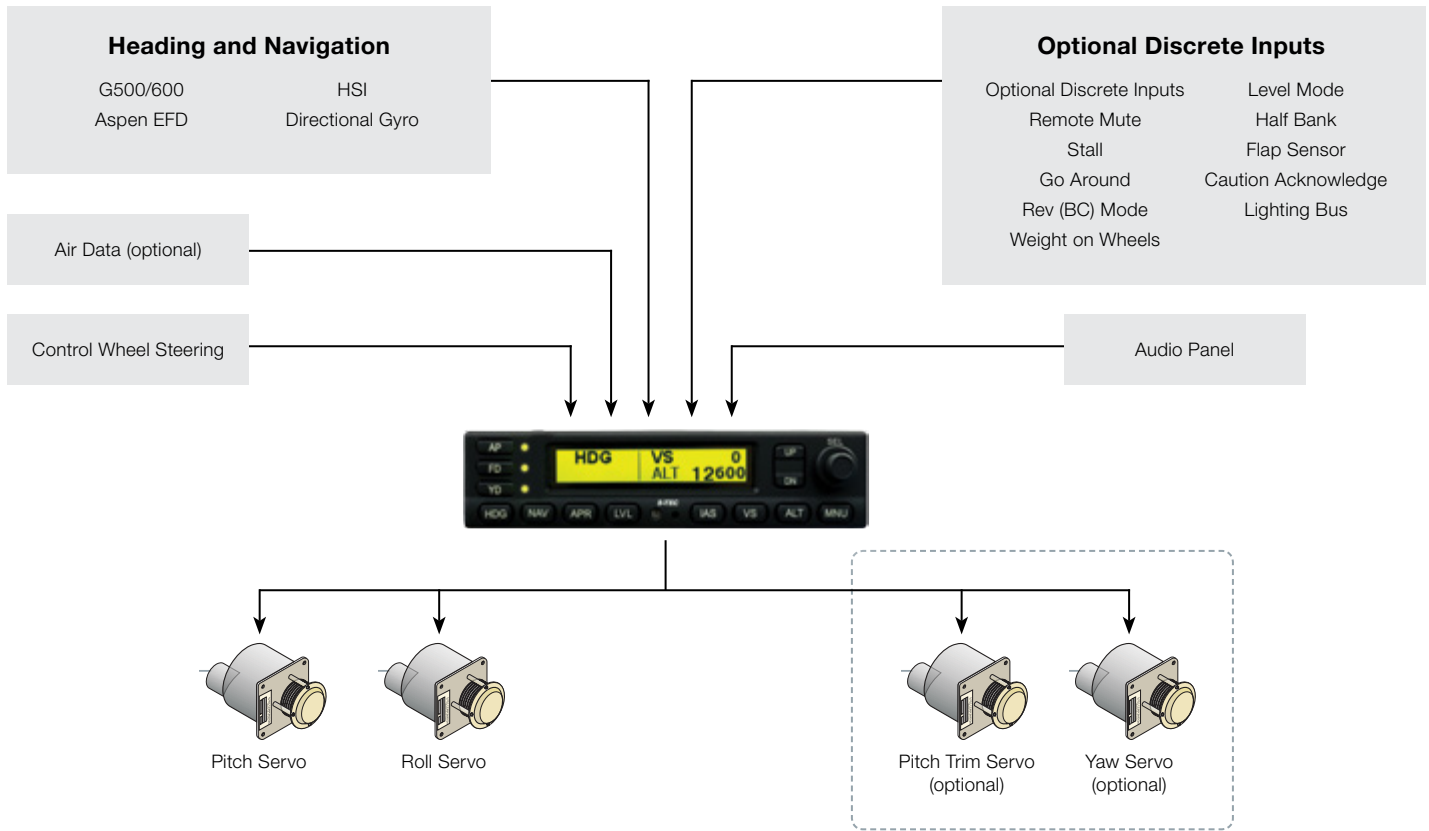
Precise, Digital Flight Control for Every Phase of Flight

No matter if you're flying a single on a sunny Sunday or a high-performance twin down to minimums on a dark and stormy night, the S-TEC 3100 DFCS will make every phase of every flight easier, safer and more enjoyable.

Precision Approaches/Missed Approaches

Flying a solid precision approach or missed approach in low visibility is extremely stressful even for pilots who do it every day. The S-TEC 3100 features GPS Steering (GPSS), which enables the aircraft's GPS navigation system to accept roll steering commands from the system. The end result is extremely accurate, “hands-off” GPS navigation in high-workload situations. Additionally, by accepting commands directly from the GPS, the GPSS function enables the S-TEC 3100 to not only fly very precise GPS courses, it also does an equally exceptional job of flying very precise, very stabilized GPS and missed approaches. Your passengers will be impressed.





Specifications

Dimensions

- Width: 6.25" (159mm)
- Height: 1.45" (37mm)
- Depth: 9" (229mm)

Weight

- 2.6 lbs (1.18 kg) (DFCS only)

TSOs

- TSO-C198 Automatic Flight Guidance and Control System Equipment (AFGCS)
- Class A1 – Fixed Wing Autopilot
- Class B – Yaw Damper
- Class C – Flight Director

Hardware

- RTCA DO-160G to meet TSO-C198

Software

- RTCA DO-178B

Complete List of Features of the S-TEC 3100 Digital Flight Control System:

- Built-in autopilot, flight director and yaw damper controls (yaw damper optional) – Optional Yaw Control includes coordinated turns
- Flight Director capability can drive pitch and roll flight director bars together with mode annunciations on compatible displays
- Lateral and vertical navigation functions including LPV, FMS, GPSS, VOR, LOC, GS
- Vertical navigation targets set on the bezel or compatible EFIS
- Heading Hold
- Altitude Preselect and Hold with Autotrim
- Vertical Speed Control
- Indicated Airspeed Control
- Under Speed and Over Speed Warnings
- Roll Envelope Exceedance Warning
- Standard Pitch Trim Control
- Course Intercept capability
- Dual Mode – HDG/NAV and HDG/APR
- Control Wheel Steering
- GPS Steering (GPSS) Mode
- Voice Annunciations
- Half Bank
- And more



PRECISE PERFORMANCE.
PROVEN EXPERIENCE.
PERSONALIZED ATTENTION.