

RVSM
COMPATIBLE

STRAIGHT
& LEVEL
RECOVERY

PRECISION
& MISSED
APPROACHES

ENVELOPE
PROTECTION
& ALERTING



S-TEC 5000 Digital Autopilot

Advanced, digital control for every phase of flight
in high-performance jets and turboprops

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S-TEC 5000 Digital Autopilot for High-Performance Jets and Turboprop Aircraft

The S-TEC 5000 digital autopilot is the ideal system to maximize the capabilities of your Genesys Aerosystems 3D Synthetic Vision EFIS or other electronic flight instrument system with Area Navigation.



Pilots / operators of turboprop and light jet aircraft will appreciate the advanced features that make every phase of flight easier, safer, and more reliable. Advanced capabilities help reduce pilot workload while significantly improving mission efficiency.

From “wheels in the wells to runway in sight,” the S-TEC 5000 integrates with your digital EFIS or FMS to deliver effortless command and control, and the precision that is absolutely essential in today’s crowded airspace.

RVSM Compatible

With the S-TEC 5000, high-performance jets and turboprop aircraft can operate within Reduced Vertical Separation Minimum (RVSM) airspace. This enables operators to safely fly improved profiles and achieve greater fuel efficiency while simplifying flight planning and reducing administrative overhead.

Straight and Level Recovery

The Straight and Level button provides fast, simple recovery from an unusual attitude if the pilot should lose situational awareness or become disoriented. With a single button push, the Straight and Level function is engaged and overrides previous inputs to safely return the aircraft to a neutral attitude. As a last line of defense, this additional element of safety provides welcome peace-of-mind.

EFIS Integration

With the Genesys Aerosystems 3D SVS EFIS (and other compatible EFIS displays), armed modes are displayed on the PFD display and in full color on the screen of the S-TEC 5000. The Flight Director intuitively depicts pitch, bank angle, attitude and more on the PFD. Comprehensive integration between the compatible EFIS and the S-TEC 5000 allows the pilot to set altitude and heading bugs directly on the EFIS.



Also, when interfaced with the Genesys Aerosystems EFIS, the S-TEC 5000 can perform pitch control such as automatic step down altitude capture and hold as part of an approach.





Envelope Protection/Alerting

The S-TEC 5000 greatly reduces the chance for inadvertent stalls, over-speeds, or excessive banking due to autopilot inputs. If the aircraft approaches stall while the S-TEC 5000 is engaged, the autopilot will automatically reduce the maximum bank and vertical speed to maintain safe flight. An annunciated alert will notify the pilot.

In situations involving overspeed or excessive banking, similar corrections and warnings are implemented to mitigate potentially hazardous maneuvers.

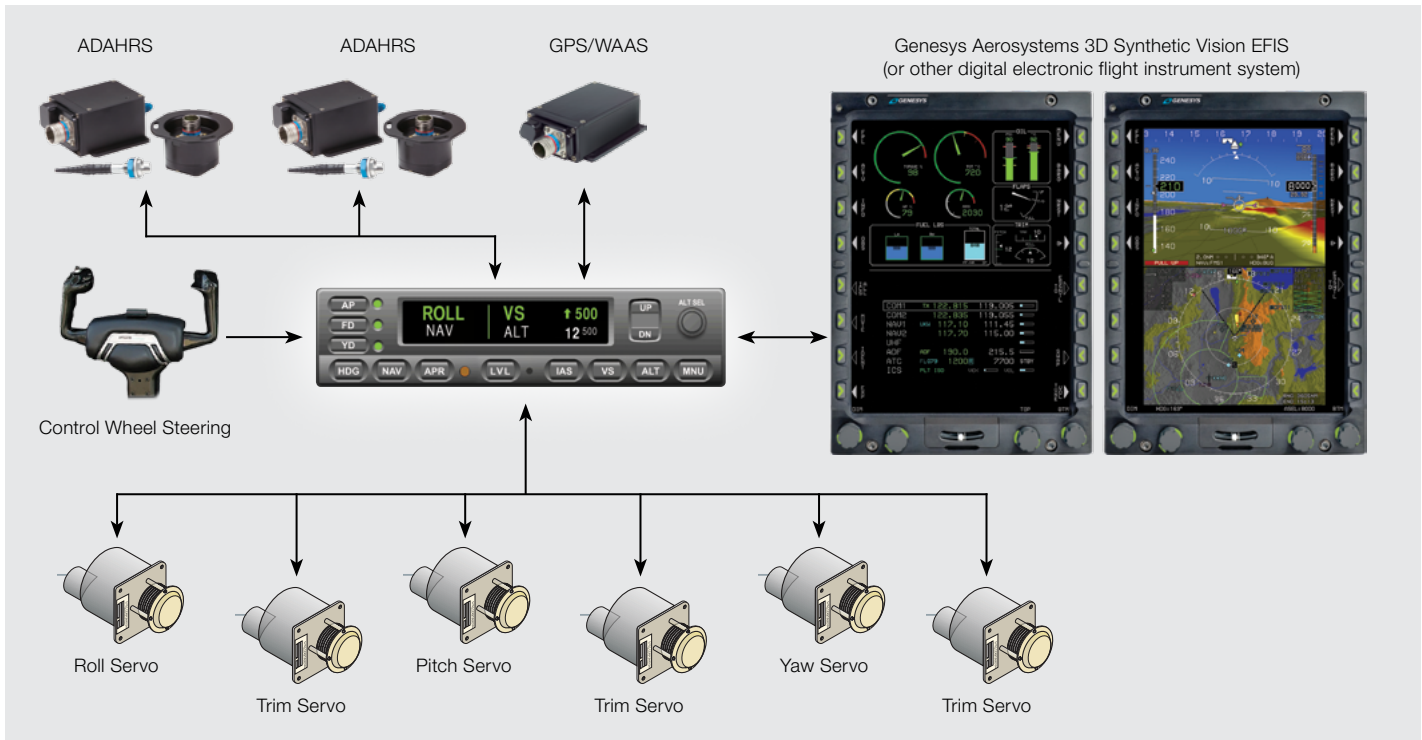
The S-TEC 5000 achieves this added level of safety while minimizing the impact these auto-procedures have on your mission objectives for navigation, climb or approach.



Precision Approaches/Missed Approaches

GPS Steering (GPSS) Mode integrates the S-TEC 5000 autopilot with the aircraft's GPS NAV receiver to accept roll steering commands and provide extremely accurate "hands off" GPS navigation.

In addition, by taking commands directly from the GPS, the GPSS function permits the autopilot to not only precisely fly en route GPS courses, it also does an excellent job of flying precise GPS approaches, missed approaches, and any other phase of flight where the S-TEC 5000 autopilot is engaged.



Specifications

Dimensions

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

Weight

- 2.6 lbs (1.18 kg) (FCC only)

TSOs

- TSO-C198 Automatic Flight Guidance and Control System Equipment (AFGCS)
- ETSO-C9c Automatic Pilots
- ETSO-C52b Flight Director Equipment

Hardware

- RTCA DO-160G to meet TSO-C198

Software

- RTCA DO-178B Level A

Features/Functions

The S-TEC 5000 offers full capabilities of a top-tier digital flight control system,* including:

- Heading Preselect & Hold
- PFD Integration
- Altitude Preselect & Hold w/Autotrim
- Digital Vertical Speed Command
- Yaw Damper
- Course Intercept Capability
- Dual Mode - HDG/NAV & HDG/APR
- VOR/LOC/GS/REV/GPS Course
- NAV Flag Warnings
- Flight Director
- Pitch Steering
- Control Wheel Steering
- GPS Steering (GPSS)
- Envelope Protection and Alerting
- Heading Control
- Vertical Speed Control
- Indicated Airspeed Control
- Autopilot Mode Annunciations
- Voice Annunciations 01 Certification
- All Axis Trim Control