

LATEST
TECHNOLOGY

LIGHTWEIGHT

COMPACT

EASY
INSTALLATION

GPS-WAAS Receiver

Meets requirements for primary navigation receiver for enroute and approach guidance

Latest Technology: TSO-C145c BETA 3 for LPV approaches.

Lightweight: Less than 1.0 lb.

Compact: 1.4"H x 2.6"W x 4.0"D.

Easy installation: Stand alone or display integrated.

Greater precision

The GPS-WAAS receiver from Genesys Aerosystems utilizes the signals coming from Global Positioning System (GPS)

Satellite Constellation and Satellite-Based Augmentation System (SBAS) such as WAAS or EGNOS. The primary function of the unit is to compute the Position, Velocity of an aircraft, and the Precise Time (PVT). It also computes the integrity of the PVT from the SBAS signal, if available. The GPS detects and excludes failed satellites (FD/FDE) using Receiver Autonomous Integrity Monitoring (RAIM) algorithm, whenever there are enough number of satellites, regardless of SBAS availability.

GPS-WAAS Receiver

A Global Positioning Receiver (GPS) combined with the unparalleled accuracy and integrity monitoring of Wide Area Augmentation System (WAAS)

GPS-WAAS Specifications

GPS Type:	C/A code Sensor with WAAS capability	Integrity Monitoring:	available as per DO-229D SBAS integrity (if available), FD and FDE RAIM, Predictive RAIM, all as per DO-229D	Airframe Side:	Souriau PN: 8D5-13F35SN
Conformity:	DO-229D DO-254, Level-B DO-178B, Level-B DO-160E ARINC 743A-4	BITE:	Power-on Self Test and Online BITE	Antenna Connector Type:	Amphenol TNC
Certification:	TSO-C145c Class Beta 3: LPV	Communication:	RS-232: One host port, 19.2 kbps One maintenance port 19.2 kbps Input discrete: Air/ground, self test, data load, master reset Output discrete: Fail navigation, fault discrete, power fail Software protocol: Binary, proprietary	Thermal Protection:	Internal thermal regulation and monitoring
Frequency:	1575.42 MHz	Software Upgrade:	Field upgradeable	Input Voltage:	Nominal 14 to 28V, dual bus
No. of Channels:	Total: 15 (GPS: 12 WAAS: 3)	DO-160E Qualification:	[[F2)V]BBBRXWXSFSZZAZ [ZC][YL]M[A3J33]XXAC	Maximum Input Voltage:	Spikes to 80V
Architecture:	Digital Signal Processor with FPGA and RF Front-end	MTBF:	40,000 hrs. (MIL-HDBK 217)	Minimum Input Voltage:	Down to 10V for 30 seconds
Measurement Accuracy:	Receiver noise per DO-229D	COM Ports:	RS232, 19,200 bps	Size:	1.4"H x 2.6"W x 4.0"D (excluding connectors and mounting flange)
Time:	100 ns, Synchronized to either GPS or UTC (SA off)	Main Connector Type:	MIL-C 38999 Souriau PN: 8D0C-13F35PN	Weight:	0.95 lbs.
Sensitivity:	Acquisition: -136 dBm Tracking: -140 dBm			Enclosure:	Machined 6061-T6 aluminum
Update Rate:	5 Hz			Finish:	Black anodized
Dynamics:	Speed, acceleration and jerk per DO-229D requirements for en-route, terminal, non-precision approach and precision approach				
Alert:	Alert in the form of data				



PRECISE PERFORMANCE.
PROVEN EXPERIENCE.
PERSONALIZED ATTENTION.