



GENESYS[™] GPS-WAAS RECEIVER

PRIMARY NAVIGATION RECEIVER FOR ENROUTE/APPROACH GUIDANCE FOR FIXED-WING AND ROTARY-WING PLATFORMS



A Global Positioning Receiver (GPS) combined with the unparalleled accuracy and integrity monitoring of Wide Area Augmentation System (WAAS) meets requirements for primary navigation receiver for enroute and approach guidance.

FEATURES INCLUDE

- 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



A GPS COMBINED WITH ACCURACY AND INTEGRITY MONITORING WAAS

GPS-WAAS SPECIFICATIONS	
Features	Specifications
GPS Type	C/A code Sensor with SBAS capability
Conformity	DO-229D DO-254 DO-178C, Level-B DO-160G ARINC 743A-4
Certification	TSO-C145c Class Beta 3: LPV
Frequency	1575.42 MHz
No. of Channels	Total: 15 (GPS: 12 SBAS: 3)
Architecture	Digital Signal Processor with FPGA and RF Front-end
Measurement Accuracy	Receiver noise per DO-229D
Time	100 ns, Synchronized to either GPS or UTC (SA off)
Sensitivity	Acquisition: -136 dBm Tracking: -140 dBm
Update Rate	5 Hz
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 available as per DO-229D
Integrity Monitoring	SBAS integrity (if available), FD and FDE RAIM, Predictive RAIM, all as per DO-229D
BITE	Power-on Self Test and Online BITE
Communication	RS-232: One host port, 19.2 kbps One maintenance port 19.2 kbps
Input discrete	Not available
Output Discrete	Not available
Software Protocol	Binary, proprietary software
Upgrade	Factory upgradeable
DO-160E Qualification	[(F2)X]BBBUXWXSFSZBAZ[ZC][YR]H[A3J33]XXAC
MTBF	78,000 hrs. (MIL-HDBK 217)
COM Ports	RS232, 19,200 bps
Main Connector Type	MIL-C 38999 Souriau PN: 8D0C-13F35PN
Airframe Side	Souriau PN: 8D5-13F35SN
Antenna Connector Type	Amphenol TNC
Thermal Protection	Internal thermal regulation and monitoring
Input Voltage	Nominal 14 to 28V, dual bus
Maximum Input Voltage	Spikes to 80V
Minimum Input Voltage	Down to 10V for 30 seconds
Size	1.4"H x 2.6"W x 4.0"D (excluding connectors and mounting flange)
Weight	0.95 LBS.
Enclosure	Machined 6061-T6 aluminum
Finish	Black anodized





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