



NEXTGEN FMS/GPS

NAVIGATE SMART.
HIGH-PERFORMANCE NEXT GENERATION
NAVIGATION MANAGEMENT SYSTEM.

Building on systems engineering and integration know-how, FreeFlight Systems effectively implements comprehensive, high-integrity avionics solutions. We are focused on the practical application of NextGen technology to real-world operational needs — OEM, retrofit, platform or infrastructure.

FreeFlight Systems is a community of respected innovators in technologies of positioning, state-sensing, air traffic management datalinks — including rule-compliant ADS-B systems, data and flight management. An international brand, FreeFlight Systems is a trusted partner as well as a direct-source provider through an established network of relationships.

3 GENERATIONS OF EXPERIENCE BEHIND NEXTGEN AVIONICS

NEXTGEN LEADER. INDUSTRY EXPERT. TRUSTED PARTNER.
SHAPE THE SKIES.



NEXTGEN FMS/GPS

The 2301 FMS/GPS is a fully self contained Flight Management System designed to provide high performance IFR navigation and GPS based landing capability (LPV) for fixed and rotary wing aircraft. The 2301 FMS/GPS supports numerous current and planned NextGen applications.

2301 FMS/GPS

SPECIFICATIONS		
Model	2301	LPV Capable GPS Flight Management System
Antenna	WAAS GPS	Any TSO-C190 Antenna
Database Capacity	No practical limit	
Database Loading	Via USB	
CERTIFICATIONS		
System	TSO-C146d	Class Gamma 3
Environmental	DO-160G	Including Rotorcraft Vibration Profiles
Temperature Range Antenna	-20°C to +55°C -55°C to +70°C	
Operating Altitude	50,000 ft	
Design Assurance (Software)	DO-178C Level B	
Design Assurance (Hardware)	DO-254 Level B	
PHYSICAL CHARACTERISTICS		
Mounting Scheme	Dzus Rail	Center Console Standard Width
Size	5.75" W 7.68" D 3.0" H	
Weight Antenna	2.8 lbs 0.4 lbs	
ELECTRICAL CHARACTERISTICS		
Input Power	10-40 VDC	

The 2301 FMS/GPS is packaged as a Dzus mount system for installation in the center console and uses the same connector type and pin-out as its successful predecessor, the 2101 I/O Approach Plus. Additional functionality such as LPV steering commands are outputted on a new rear mounted connector. For applications not requiring LPV, the 2301 is a complete form/fit and function replacement for the 2101.

For advanced applications such as LPV, the integration of navigation and capabilities in a single box makes transition from en-route to terminal and approach modes seamless. This makes the 2301 FMS/GPS an ideal retrofit system, eliminating the need for complex switching and annunciation, even in legacy aircraft.

The built in GPS engine will also provide position source data to an external ADS-B solution, while containing internal controls for both UAT and transponder based solutions. The system and software architecture is designed to enable integration with both "company" and ATC datelines. The design assurance of the system will enable digital ATC commands to be directly executed with simple pilot consent.

In addition to support of the same comprehensive I/O set as the 2101, and the additional I/O required for coupled LPV, the 2301 FMS/GPS also supports external inputs for cursor and soft key actions enabling HOCAS/HOTAS operation of the system in suitably equipped aircraft.

For additional product information and specifications, please contact our Sales Team at +1.254.662.0000

