

GNSS/SBAS RECEIVER DEPENDABLE STATE-OF-THE-ART GPS RECEIVER



**100,000
FLIGHT
HOURS MTBF**



1203C GNSS/SBAS RECEIVER POSITION & TIMING SOURCE RETROFIT

Harnessing cutting-edge GPS technology, the high-performance 1203C elevates situational awareness, minimizes accident risks, and ensures dependable navigation for pilots and aircraft across the globe for retrofit aircraft.



Enduring Reliability

FreeFlight Systems' 1203C SBAS/GNSS receiver is a testament to our commitment to excellence. It enhances the accuracy, reliability, and integrity of the GPS signal using a high-performance 15-channel GPS engine. This engine can position updates five times per second, ensuring precise and reliable navigation for pilots and aircraft worldwide. As a position and timing source, the 1203C has multiple STCs for ADS-Band and is TSO-C145c certified and approved to DO-160F and DO-178B Level C.

Enhanced Precision for Approaches

The 1203C meets the FAA, ICAO and Eurocontrol regulations for navigation during all phases of flight, including enroute, terminal and non-precision approaches for landing. It plays an essential part in precision approaches and supports tracking of new SBAS satellite entrants like KASS, South Pan, and others. The 1203C sensor also includes recovery from minor active spoofing events experienced in compromised parts of the world.

Uninterrupted En Route Navigation

When using the 1203C as the GPS source, the system

ensures reliable guidance by performing Receiver Autonomous Integrity Monitoring (RAIM) for all phases of flight.

Localized Performance with Vertical Guidance (LPV)

The high accuracy of the 1203C and global certification enables pilots to rest easy, knowing they are not dependent on ground-based navigation aids.

Global Solution

FreeFlight's SBAS/GNSS Receiver is a global solution that empowers pilots with consistent and precision GPS navigation support across oceans and remote regions, giving them the confidence to navigate even in the most challenging environments.

Low Cost of Ownership

The 1203C field data has a predicted Mean Time Between Failure (MTBF) of 36,443 flight hours. Current field experience, based on an estimated 1.5 million flight hours of service, yields an actual MTBF in excess of 100,000 hours, significantly reducing maintenance costs.



1203C GNSS/SBAS RECEIVER

Accuracy. Enhanced Situational Awareness. Maintenance Efficiency.



The 1203C presents an ideal retrofit solution for all aircraft and heavy rotorcraft operations looking to capitalize on NextGen's benefits. Its performance and cost-effectiveness ensure you get the most value from your investment and next-generation navigational tools.

Equipped with a certified ADS-B position source, the 1203C is not just globally compliant, but also globally applicable, approved for all ICAO jurisdictions.

- Integrated 15-channel 1203C SBAS/GNSS sensor creates a fully rule-compliant ADS-B Out system when paired with a compatible, certified Mode S transponder.

It is approved position source for:

- TAWS/FMS
- RNP
- CPDLC timestamp

This global compliance and reliability of the 1203C ensures the safety of your operations, providing you with peace of mind no matter where your fleet operates.

When paired with a compatible, certified Mode S Extended Squitter transponder, the 1203C SBAS/GNSS forms a fully compliant ADS-B Out system.

TRANSPONDER	STC OWNER	AIRCRAFT
BAE APX-119	Sierra Nevada Corporation	PZL M28 05
Becker Avionics BXT6515/6553	FreeFlight Systems	AML Part 23 AML Part 23
ACSS NXT SERIES	Steven's Aviation	AML Part 23 ALM Part 25
ACSS NXT-800	GoAeroMx	A300, A310, 767, 757, 777, MD10, MD11
Honeywell RCZ-8XXM	New United Goderich	Embraer 135/145
Rockwell Collins TDR-94D	CMD Flight Solutions	AML Part 23 AML Part 25
Rockwell Collins TDR-94D	Collins Aerospace	AML Part 23 AML Part 25
Rockwell Collins TDR-94D	Prostar Aviation	AML Part 25
Rockwell Collins TPR-901	Allegiant Air	A320
Becker Avionics BXT6515/6553	DAC International	AML Part 25
Honeywell TRA100B	H4 Aerospace	B737
Honeywell TRA100B	Scandinavian Avionics	AML Part 25

1203C SPECIFICATIONS

TYPE	15-channel CPS receiver
POSITION UPDATE RATE	5 Times per second output at one/second
VELOCITY	1,000 Knots, steady state
PERFORMANCE	Compliance with DO229D

CERTIFICATIONS

SYSTEM	TSO-C145c Class Beta 1
ENVIRONMENTAL	DO-160F
SOFTWARE ASSURANCE	DO-178 Level C
INSTALLATION APPROVALS	Approved AC 20-165B Position Source

PHYSICAL CHARACTERISTICS

DIMENSIONS	1203C	Width: 4.7 in. (119.38 mm)	Depth: 8.7 in. (220.98 mm)	Height: 1.6 in. (40.64 mm)
	ANTENNA	Width: 3.0 in. (76.2 mm)	Depth: 3.7 in. (93.98 mm)	Height: 0.8 in. (20.32 mm)
WEIGHT	1203C	1.9 lb (861 g)		
	ANTENNA	0.5 lb (227 g)		
OPERATING TEMPERATURE	1203C	-40°C to +70°C		
	ANTENNA	-55°C to +85°C		
OPERATING HUMIDITY		95% AT 50°C		
COOLING		Ambient Air		
INPUT VOLTAGE*		10-32 VDC		
INPUT CURRENT*		0.3A at 14 VDC 0.2A at 28 VDC		

* Steady State



CONTINUAL INNOVATION AND PRODUCT EVOLUTION

This compatibility ensures that the 1203C is not just a current solution, but a future-proof investment that will continue to meet evolving aviation standards. Product specifications and STCs subject to change, contact sales for the latest revision.

Please contact support@freeflightsystems.com to confirm equipment integration capabilities and installation questions.
For pricing or general questions contact sales@freeflightsystems.com, or a [FreeFlight Systems Authorized Dealer](#) for details.

FreeFlight Systems is part of the ACR Group of companies.

www.freeflightsystems.com | sales@freeflightsystems.com

Copyright © 2024 FreeFlight Systems | 2024 GNSS Revision 25.03.05

