



978 ADS-B GROUND

REAL-TIME TRACKING.
ADS-B SYSTEM DESIGNED FOR
HIGH VALUE GROUND VEHICLES.

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.



978 ADS-B GROUND

Designed for airport ground vehicles operating in aircraft movement areas, FreeFlight's 978 MHz ADS-B ground system provides position reporting that is accurate down to meters in real time. This system provides critical information that air traffic controllers require to increase safety in active movement areas.

ADS-B GROUND

SPECIFICATIONS	
Model	FDL-978-GTX/E
Equipment Type	Ground Vehicle Universal Access Transceiver (UAT)
Link Frequency	978 MHz
Transmitter Power	20 watts max at antenna
Transmit Antenna	UAT/DME antenna TSO-C66c, TSO-C74c, TSO-C112 compliant
GPS/SBAS Antenna	TSO-C190 & TSO-C144 compliant
On-Board Map Storage	Multi-Polygon, 6,000 points max
Power	10-40 VDC, Typical 0.14 A @ 28 VDC
CERTIFICATIONS	
TSO Compliance (Designed to meet)	TSO-C154c (B2) TSO-C145c (Beta 1)
Environmental	DO-160G
Software	RTCA/DO-178B Level C
PHYSICAL CHARACTERISTICS	
Size	1.8" H 5.1" W 5.8" D
Weight	1.1 lbs
Operating Temperature	-40°C to +70°C

FreeFlight Systems is the sole-source provider of ADS-B equipment for airport ground vehicles per the FAA's Advisory Circular 50/5220-26 Change 1



FreeFlight's RANGR-G includes an ADS-B aviation-certified internal WAAS/GPS sensor that provides the ability to collect position, velocity, time and other vehicle state information. The system transmits data from the airport ground vehicle to air traffic and ground control once per second, allowing positive identification of the vehicle. The system utilizes robust Universal Access Transceiver (UAT) technology, and is fully compatible with ASDE-X and multilateration systems, ensuring seamless integration with existing traffic control support systems.

Utilizing an internally stored map of the airport control area, the system can be configured to either transmit or cease transmission of vehicle information when located in specified areas. Support and maintenance is managed via the USB port and an easy-to-use PC application that can be hosted on a laptop.

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