



VTU-20 UAT ADS-B Transmitter – Airport Vehicle Tracking System

Overview

Ground vehicle incursions into critical safety and movement areas on airport surfaces is on the rise. uAvionix's Vehicle Tracking Unit (VTU -20) minimizes this risk by using a Federal Aviation Administration (FAA) approved, vehicle-mounted Automatic Dependent Surveillance – Broadcast (ADS-B) transmitter that continually broadcasts a vehicle's location. The transmitter can be permanently or magnetically mounted to all airside vehicles, including utility, emergency, snow-removal, and maintenance equipment. Each vehicle is clearly and uniquely identified, providing an essential addition to any surface movement guidance and control system.

The design of VTU-20 ensures easy installation, integration and interoperability with Airport Surface Detection Equipment, Model X (ASDE-X), Airport Surface Surveillance Capability (ASSC), or ADS-B receiver surveillance solutions for airport surface control and situational awareness. The all-in-one external design includes a 20W Universal Access Transceiver (UAT) transmitter, internal certified Global Positioning System (GPS) and integrated antennas.

A single cable connection provides both power and data to the rugged enclosure which attaches using a magnetic or permanent mechanical mount, reducing installation time and vehicle modifications. The provided software application allows vehicle configuration and uploading of squitter transmission maps.

For other inquiries, please contact airports@uavionix.com.

uAvionix VTU-20



Squitter Transmission Maps



VTU-20 uses FAA approved Squitter Transmit Maps to automatically enable and disable transmission based on its location on the airfield.



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Specifications

Transmit Message Type	Identification, Surface Position and Operational Status Messages
Transmit Power	20 Watts Nominal
Transmit Frequency	978 MHz
Vehicle ID	Field configurable
24-bit ICAO ID	Field configurable
Operating Temperature	-45° to +80 °C
Input Power	9V to 32 Volts DC, 1.5 Watts
Size (mm)	134x138x80
Squitter Transmission Map	Field configurable

Features

- Externally mounted, minimal footprint
- FAA approved under U.S. FAA-E-3032, Vehicle (ADS-B) Specification
- Internally integrated FAA Technical Standard Order (TSO) -C145e Class B1 GPS
- Easy PC configuration and squitter map loading for inclusion and exclusion of transmission regions
- In-cab control panel for status and manual on/off control
- Installation kit options for temporary or permanent mounting, allowing for reuse across seasonal vehicles

Mechanical Specification

