

Overview

SkyLink meets or exceeds the Command and Control (C2) Data Link Minimum Operational Performance Standards (Terrestrial) for Control and Non-Payload Communication (CNPC) in support of an Unmanned Aircraft Systems (UAS). Infrastructure ready, SkyLink is an L-Band (960-1164MHz) bi-directional Multiple Input, Single Output (MISO) dual radio system.



Features

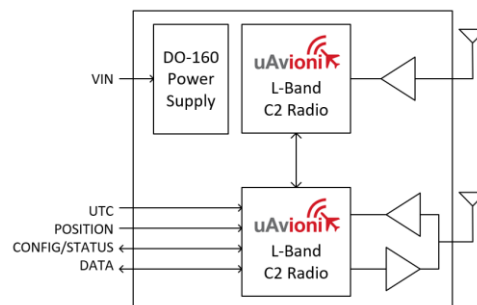
- DO-362 with Class 1LYAM and 1LYGM configurations
- Configurable as the Airborne (ARS) or Ground (GRS) Radio
- Dual Radio System
 - *User Plane* Radio
 - Transparent bi-directional data link between GRS and ARS
 - *Control Plane* Radio
 - Handles signaling between ARS and GRS entities in support of link management functions
 - Handover function when passing piloting control from the *Serving* GRS to the *Target* GRS
 - Diversity radio after Switchover performing spatial, pattern diversity and polarization
- SMA, MMCX antenna connectors
- Status, integrity and health monitoring
- UTC synchronized TDMA, Geo synchronized FDMA and pseudo-random CDMA for Multiple Access
- Environmental DO-160G
- Software DO-178C Level C
- Complex Hardware DO-254 Level C

Regulatory

- FCC 47 CFR Part 87 ID 2AFFTC2XCP0

Technical Specifications

Specification	Value
Input Power	11-34V (3S-8S LiPo) 16W Peak
Size	47x54x13mm
Weight	70 grams
Operating Temp	-45 to 70°C
Radio	
Band	960-1164MHz
Transmit Power	10W Nominal
Spreading	Code and Frequency
Bandwidth	200kHz
Receiver Sensitivity	
User Receiver	-118dBm
Control Receiver	-121dBm
Doppler Capture Range	±16kHz
Interfaces	
User Plane	
Data rate	57600bps
Protocol	Transparent Binary
Control Plane	
Data rate	115200bps
Protocol	GDL90+
Timing/Position	
UTC	1PPS Time Pulse
Position	NMEA 0183 115200bps
Environmental	
DO-160G	Temperature Cat B2



Electrical Specification

User Interface

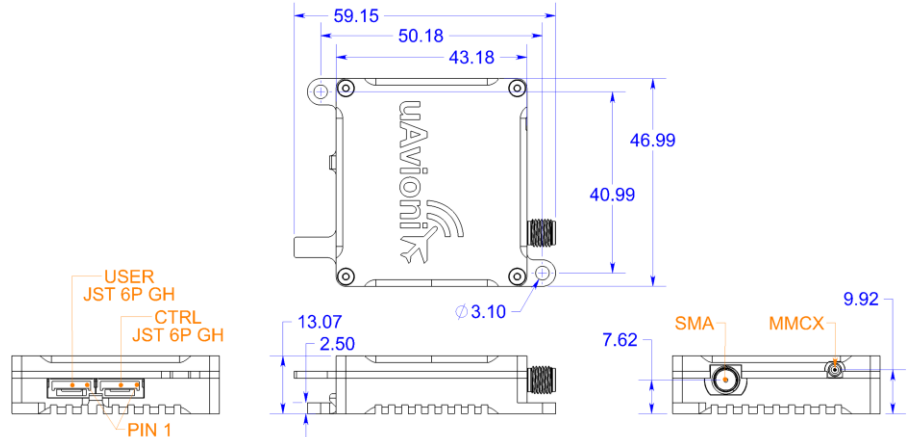
Pin	Type	Physical	Port
1	5V	5V OUT	
2	RXD	IN	User Data
3	TXD	OUT	User Data
4	SDA	I/O	skyTrac
5	SCL	I/O	skyTrac
6	GND		

Timing/Position, Control Interface

Pin	Type	Physical	Port
1	5V	5V OUT	
2	RXD	IN	Position
3	UTC	IN	1PPS
4	RXD	IN	Control
5	TXD	OUT	Control
6	GND		

Mating Connectors: JST GHR-06V-S

Mechanical Specification



Control Plane Monitor

