muLTElink5060

Multiple Link Airborne Radio System

Overview

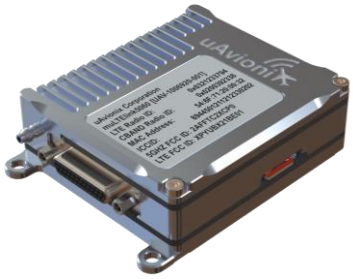
muLTElink is a multiple link airborne radio system that combines a DO-377A Link Executive Manager (LEM) with integrated LTE and C-Band command and control (C2) radios plus support for an external ISM C2 radio. muLTElink connects to an autopilot via a transparent RS232 serial interface. muLTElink is plug and play with the SkyLink915 ISM Band CNPC radio and supports SATCOM/ethernet interface radios. It also streamlines platform integration by automatically registering aircraft with SkyLine Cloud Managed BVLOS service.

Features

- Transmits and receives simultaneously on a available links, offering multi-band path diversity.
- Integrated airborne Link Executive Manager (LEM) that complies with DO-377A.
- Transparent, protocol agnostic, RS232 autopilot telemetry interface.
- Integrated Global LTE Cat 1 radio exclusively for Command Non-Payload Control (CNPC).
- Integrated SkyLink5060Micro C-Band airborne radio system (ARS).
- Optional external SkyLink915 ISM Band airborne radio system (ARS).
- Optional external SATCOM or DHCP WAN/LTE device.
- User accessible nano SIM card.
- Automatic aircraft registration with SkyLine Cloud Managed BVLOS Service.
- Ethernet reprogramming and ARS configuration interface
- Environmental DO-160G
- Software DO-178C Level C
- Complex Hardware DO-254 Level C

Regulatory

- SkyLink FCC 47 CFR Part 15.247 ID: 2AFFTC2XCP0 (in progress)
- LTE FCC ID: XPYUBX21BE01



Technical Specifications

Parameter	Value
Input Voltage / Power	9-31 VDC
Size	19 x 51 x 71 mm
Weight	100 grams
Operating Temp	-45 to 70°C
C-Band Radio	
Band	C-Band: 5030 to 5091 MHz
Transmit Power	100 mW
Receiver Sensitivity	-113.5 dBm
Bandwidth	210 kHz
Doppler Capture Range	±12.5 kHz
LTE Radio	
Service	Global LTE Cat 1
LTE FDD Bands	1, 2, 3, 4, 7, 8, 12, 13, 18, 19, 20, 26, 28
LTE TDD Bands	38, 39, 40, 41
SIM	Global IoT eSIM
External Interfaces	
Timing/Position	
Interface	RS-232 115200 bps
Position Protocol	NMEA 0183
UTC	1 PPS Time Pulse
External CNPC User	
Interface	RS-232 57600 bps
Protocol	Binary, Transparent
External CNPC Control	
Interface	RS-232 115200 bps
Protocol	UCP
External Ethernet Radio	
Interface	JST.GH
Protocol	Ethernet
Autopilot Telemetry	
Interface	RS-232 or TTL 57600 bps
Protocol	Binary, Transparent
Environmental	
DO-160G	Temperature Cat B2

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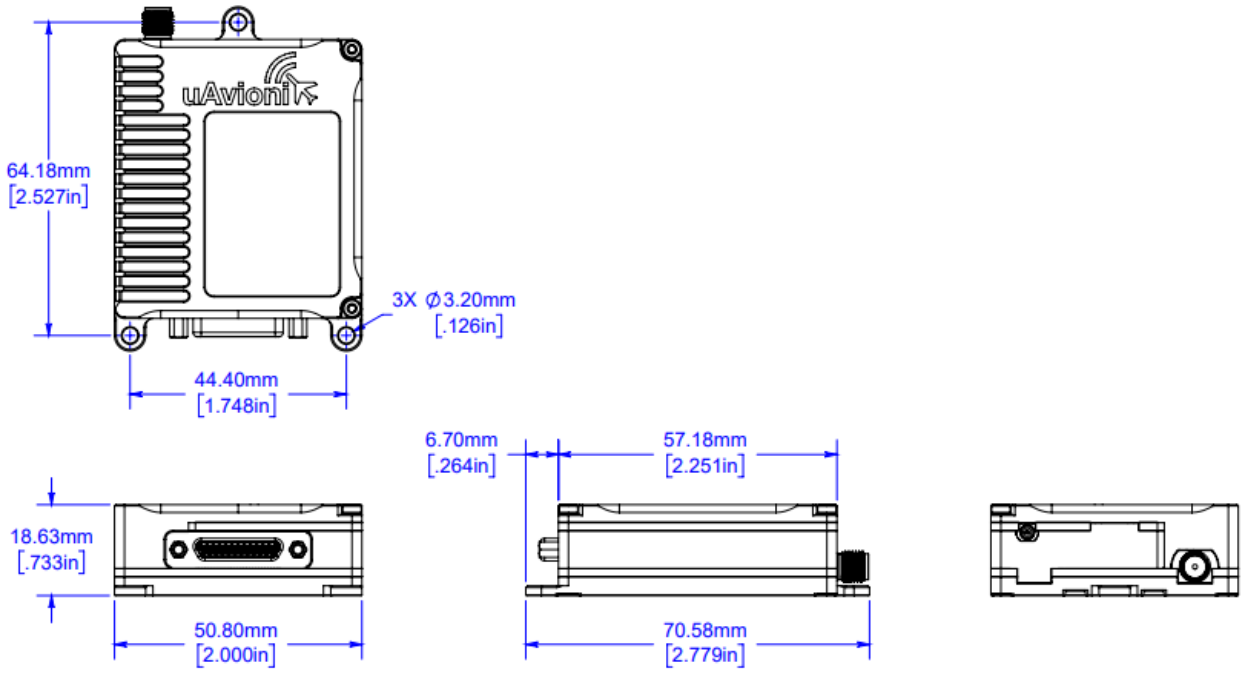
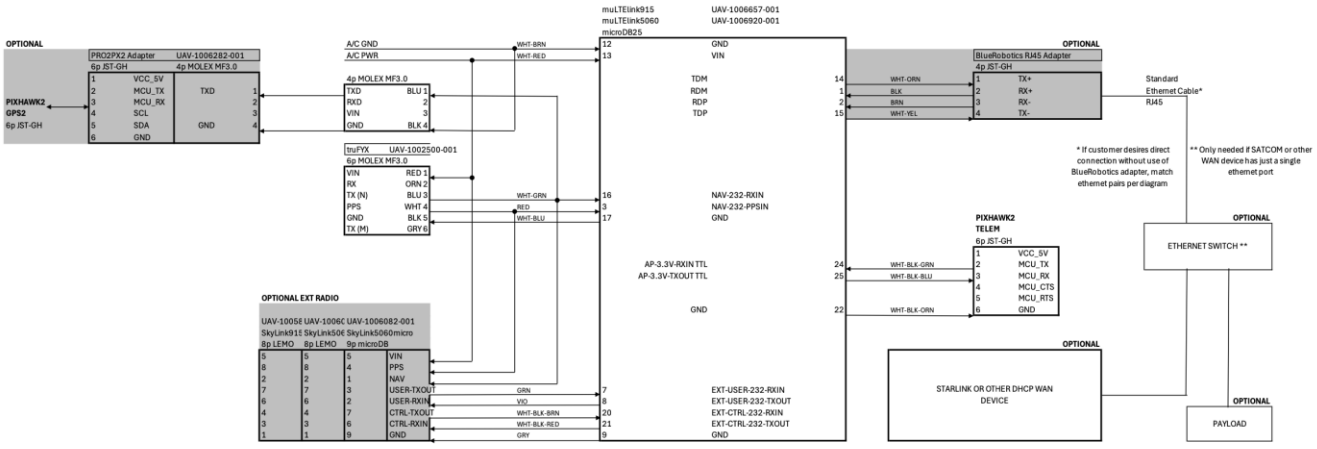
Mechanical Specifications



Electrical Specifications



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