# uAvionity SkyLink5060Micro

**C-band CNPC Radio Data Link** 

### **Overview**

SkyLink5060Micro is a C-Band (5030-5091 MHz) bidirectional radio system offering UAS operators reliable platform control using aviation-protected spectrum. It complies with the RTCA DO-362A standard for UAVs operating below 1000 ft above ground level (AGL). SkyLink5060Micro provides a protocol agnostic autopilot telemetry interface for Command and Control (C2) data, and has built in system status monitoring to meet the requirements of RTCA DO-377A.

#### **Features**

- Complies with Category AXS of DO-362A.
- Max 100 mW output power, suitable for operations below 1000 ft AGL.
- Integrated status, integrity, and health monitoring of both local (airborne) and remote (ground) radio systems to meet the requirements for the Data Transfer, Security, and Routing (DTSR) subsystem in RTCA DO-377A.
- Transparent, protocol agnostic, RS232 autopilot telemetry interface.
- UTC synchronized TDD message frame structure
- Connects to SkyStation5060 and SkyStation5060LTE ground radio systems.
- Seamless integration with muLTElink915 multiple link airborne radio system.
- Supported by SkyLine Cloud Managed BVLOS Service.
- Environmental DO-160G
- Software DO-178C Level C
- Complex Hardware DO-254 Level C

## Regulatory

FCC 47 CFR Part 87
2AFFTC2XCP0 (in process)



#### **Technical Specifications**

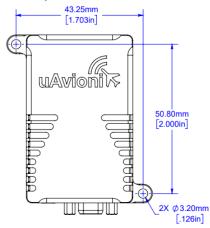
Specification	Value				
Input Voltage	4 to 36 VDC				
Power	Nominal – 3.5 W				
	Peak – 6 W				
Size	37 x 61 x 11 mm				
Weight	37.5 grams				
Operating Temp	-45 to 70°C				
Radio					
Band	C-Band: 5030 to 5091 MHz				
Transmit Power	100 mW				
Receiver Sensitivity	-113.5 dBm				
Bandwidth	210 kHz				
Doppler Capture Range	±12.5 kHz				
Data Transmission					
Modulation Symbol Rate	138 ksps 5/8 TCC				
User Data Bits (FEC Rate)	3840 Bytes/sec				
Timing/Position Input					
UTC	1 PPS Time Pulse				
Position	NMEA 0183 115,200 bps				
Interface	RS-232				
Environmental					
DO-160G	Temperature Cat B2				
Part Numbers					
SkyLink5060Micro	UAV-1006308-001				
C-Band Omni Antenna	UAV-1006288-001				
truFYX EXT GPS	UAV-1004957-001				
truFYX INT EXP GPS	UAV-1002500-001				
George G3 Autopilot	UAV-1005526-001				

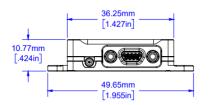
uAvionix reserves the right to alter product, services offerings, specifications, and pricing at any time without notice. © Copyright 2019 uAvionix, all rights reserved. <u>www.uavionix.com</u>

The following required statement from the Federal Communications Commission (FCC) applies to United States based entities with the exception of direct sales to the U.S. Government and units directly exported by uAvionix: This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.



### **Mechanical Specifications**





57.20mm [2.252in]
61.10mm [2.405in]

# Electrical

OPTIONAL					1101/-	1006082-001
OFTIONAL	PRO2PX2 Ada	pter UAV-1006282	-001	truFYX UAV-1002500-001		
	6p JST-GH 4p MOLEX MF3.0		6p MOLEX MF3.0		SkyLink5060micro 9p microDB	
	1 VCC 5V		-3.0	VIN RED 1	39111	
		-				
		U_TX		RX 2		
PIXHAWK2		CU_RX TXD	1	TX (N) BLU 3	NAV-RXIN	BLK 1
GPS2	4 SCL			PPS WHT 4	NAV-PPSIN	ORN 4
6p JST-GH	5 SD/		4	GND BLK 5		
	6 GN	D		TX (M) 6		
	PRO2PX2 Adapter UAV-1006282-001		-001	USER I/F		
	6p JST-GH	4p MOLEX MI	F3.0	4p MOLEX MF3.0		
	1 VC0	C_5V TXD	1	TXD 1	USER-TXOUT	RED 3
PIXHAWK2	2 MC	CU_TX RXD	2	RXD 2	USER-RXIN	BRN 2
TELEM	3 MC	U_RX VIN	3	VIN 3	VIN	YEL 5
6p JST-GH	4 MC	U_CTS GND	4	GND 4	GND	GRY 9
	5 MC	CU RTS	•			
	6 GN	-				
OPTIONAL						
	AdapterPRO	UAV-1002875	-001	CTRL I/F		
	4p MOLEX MF3.0		4p MOLEX MF3.0			
USB		TXD	1	TXD 1	CTRL-TXOUT	BLU 7
•		RXD	2	RXD 2	_ CTRL-RXIN	GRN 6
A/C PWR	RED	VIN	3	VIN 3		
A/C GND	BLK	GND	4	GND 4	-	

The following required statement from the Federal Communications Commission (FCC) applies to United States based entities with the exception of direct sales to the U.S. Government and units directly exported by uAvionix: This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.

uAvionix reserves the right to alter product, services offerings, specifications, and pricing at any time without notice. © Copyright 2019 uAvionix, all rights reserved. <u>www.uavionix.com</u>