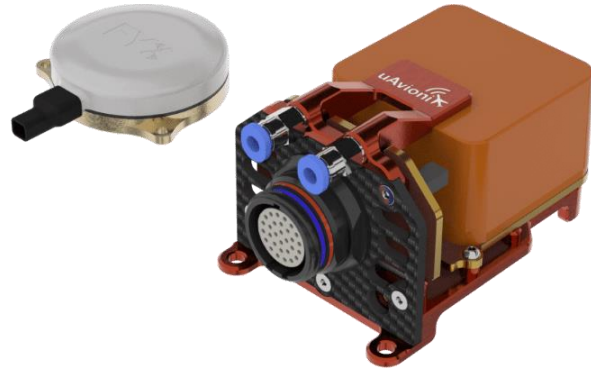


George combines the flexibility and over a decade's worth of open-source innovation in UAS autopilots with the robustness of a certifiable DAL-C hardware and a DAL-C safety and sensor processor. George has the aircraft.



George is built on the trusted and proven CubePilot autopilot. Migrate your existing Ardupilot or PX4 software and configuration to George's robust DO-254 DAL-C hardware.

Lightweight and low power consumption

UAS have limited energy resources that need to support your mission. George is engineered specifically to minimize size, weight, and power consumption for longer flight times and larger payloads.

Certifiable and tested to aviation standards

We've brought the same rigorous safety standards to UAS that have ensured aviation as the safest form of transportation. George is engineered to DO-160G and MIL-810H environmental standards, and designed to meet DO-178C / DO-254 DAL C.

SkyLine Cloud-Based C2 Radio

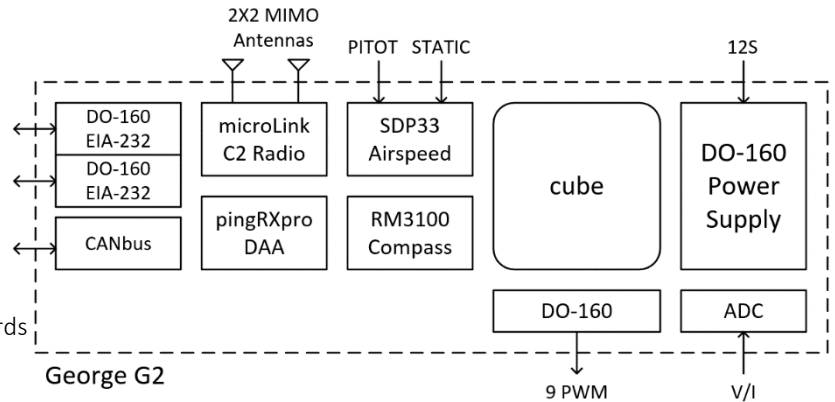
George has an integrated microLink 2x2 MIMO Radio for ISM band operations Begin communicating to ground radios for secure and reliable BVLOS missions.

Detect and Avoid (DAA) Ready

Integrated pingRXpro ADS-B IN to see nearby aircraft. For high altitude and mission-critical operations, add the ping200X transponder to be seen by surrounding aircraft and for access to controlled airspace.

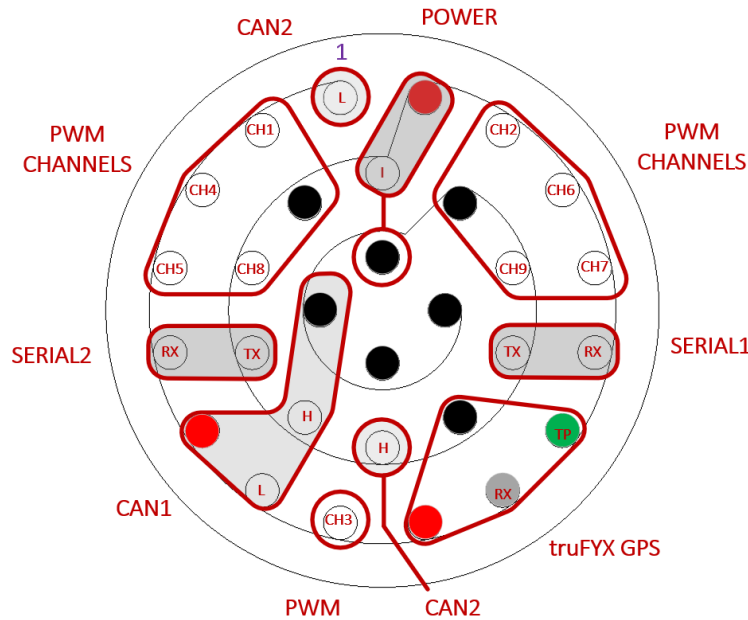
Works with truFYX, The most reliable GPS

George seamlessly integrates with truFYX, uAvionix's TSO-C145e GPS. When the credibility and integrity of your position source matters, you can trust truFYX.



Specification	Value
Input Voltage/Power	2S to 12S 2.5W
Size	44x40x63mm
Weight	68 grams
Operating Temp	-10° to 55° C
Internal Peripherals	
Core	cubeOrange
Control Radio	uAvionix microLink
ADS-B	uAvionix pingRXpro
Compass	3 axis RM3100
Airspeed	SDP33
External Interfaces	
Servo/ESC Outputs	9
GPS Input	truFYX NMEA + PPS
RS232 Serial IO	2
UAVCAN IO	2
ADC Inputs	2
RC PPM/SBUS Input	1
Options	
truFYXmicro TSO-C145e GPS Sensor	UAV-1005511-001
microLink skyStation2	UAV-1005539-001
ADS-B antenna	UAV-1004675-002
microLink antenna	UAV-1004675-001
XT90 SERIES Adapter	UAV-1005476-001

Electrical Specification



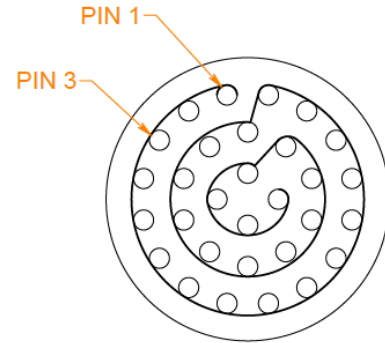
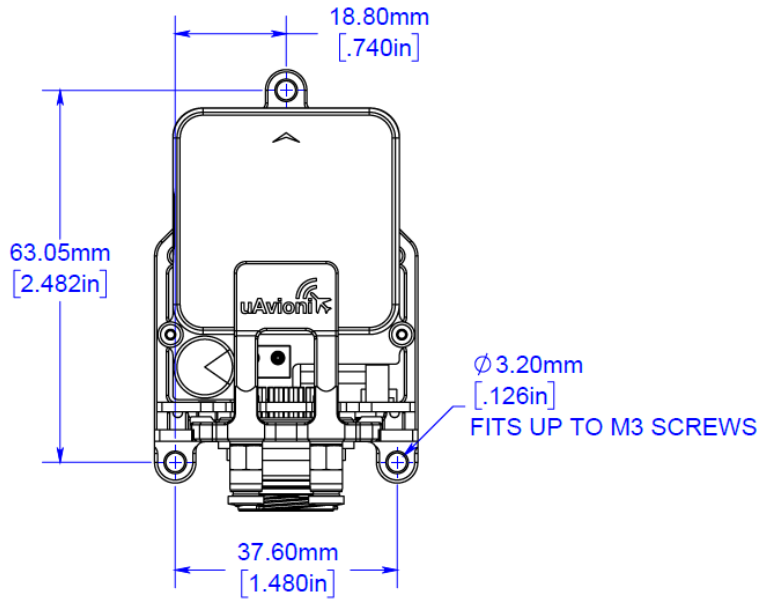
Lemo Pin	Name	Description	Resource	IO	Level
1	CAN2_L	CanBus2		IO	3.3V
2	IO_CH1	PWM_CH1	Servo/ESC	Output	3.3V
3	IO_CH4	PWM_CH4	Servo/ESC	Output	3.3V
4	IO_CH5	PWM_CH5	Servo/ESC	Output	3.3V
5	SERIAL2_RX	TELEM2 Rx	Ping200X/ZPX-B	Input	EIA/TIA-232
6	5V_CAN1	5V Output		Power	5V
7	CAN1_L	CanBus1		UI	3.3V
8	IO_CH3	PWM_CH3	Servo/ESC	Output	3.3V
9	5V_SERIAL4	5V Output		Power	5V
10	SERIAL4_RX	GPS PVT Data	truFYX GPS	Input	3.3V
11	FYX_PPS	GPS PPS		Input	3.3V
12	SERIAL1_RX	TELEM 1 Rx	SkyLink C-Band C2	Input	EIA/TIA-232
13	IO_CH7	PWM_CH7	Servo/ESC	Output	3.3V
14	IO_ch6	PWM_CH6	Servo/ESC	Output	3.3V
15	IO_CH2	PWM_CH2	Servo/ESC	Output	3.3V
16	V_BUS	Aircraft Power		Power	2S-12S
17	CURRENT			Input	3.3V
18	1ND	Aircraft Ground		Power	
19	IO_CH8	PWM_CH8	Servo/ESC	Output	3.3V
20	SERIAL2_TX	TELEM 2 Tx	Ping200X/ZPX-B	Output	EIA/TIA-232
21	CAN1_H	CanBus1		IO	3.3V
22	CAN2_H	CanBus2		IO	3.3V
23	GND	Aircraft Ground		Power	
24	SERIAL1_TX	TELEM1 Tx	SkyLink C-Band C2	Output	EIA/TIA-232
25	FMU_CH1	PWM_CH9	Servo/ESC	Output	3.3V
26	GND	Aircraft Ground		Power	
27	GND	Aircraft Ground		Power	
28	GND	Aircraft Ground		Power	
29	GND	Aircraft Ground		Power	
30	GND	Aircraft Ground		Power	

EXTERNAL CONNECTIONS LEMO 30-PIN

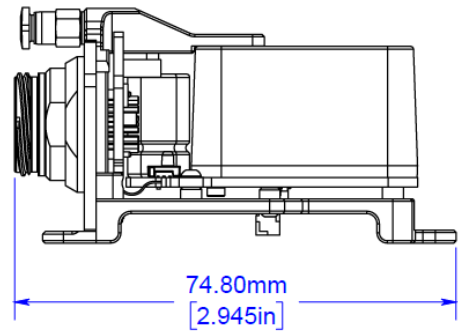
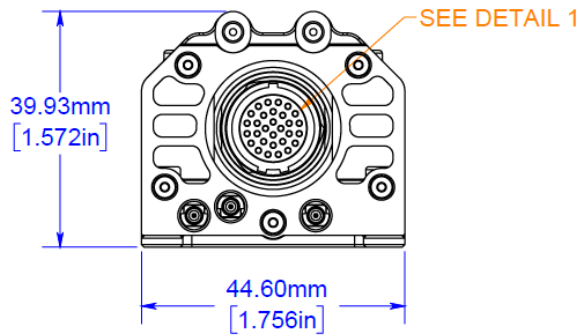
INTERNAL CONNECTIONS	Description	Resource	IO	Level
	SERIAL3_RX	MicroLink C2 Radio	Input	3.3V
	SERIAL3_TX		Output	3.3V
	SERIAL5_RX	pingRXpro ADS-B	Input	3.3V
	I2C1_SCL	RM3100 Compass	IO	3.3V
	I2C1_SDA		IO	3.3V
	I2C2_SCL	SDP33 Airspeed Sensor	IO	3.3V
	I2C2_SDA		IO	3.3V
	VOLTAGE		Power	3.3V

RC INPUT JST-GH 4-PIN	JST-GH				
	Pin	Name	Description	IO	Level
	1	NP			
	2	RC_Rx	PPM/SBUS RC Rx	Input	3.3V
	3	5V_RC	5V Output	Power	5V
4	GND	Aircraft Ground	Power		

Mechanical Specification



DETAIL 1
SCALE 4:1



Example eVTOL Configuration

eVTOL Parameters	Resource	Description	Parameter	Value
	PWM_CH1	Starboard Elevon Servo	FUNCTION	80:VTailRight
	PWM_CH2	Port Aileron Servo	FUNCTION	4:Aileron
	PWM_CH3	Pusher Motor	FUNCTION	70:Throttle
	PWM_CH4	Starboard Aileron Servo	FUNCTION	4:Aileron
	PWM_CH5	Starboard Forward Motor 1	FUNCTION	33:Motor1
	PWM_CH6	Port Forward Motor 3	FUNCTION	35:Motor3
	PWM_CH7	Port Aft Motor 2	FUNCTION	34:Motor2
	PWM_CH8	Starboard Aft Motor 4	FUNCTION	36:Motor4
	PWM_CH9	Port Elevon Servo	FUNCTION	79:VTailLeft
	SERIAL_4	GPS Data	BAUD	115:115200
			PROTOCOL	5:GPS
	SERIAL_3	TELEMETRY	BAUD	57:57600
			PROTOCOL	1:MAVlink1
	SERIAL_5	ADS-B	BAUD	57:57600
			PROTOCOL	1:MAVlink1
	CURRENT	Current ADC input	BATT_CURRENT_PIN	15:CubeOrange
	VOLTAGE	Voltage ADC Input	BATT_VOLT_PIN	14:CubeOrange
	I2C1	RM3100 Compass		
	I2C2	SDP33 Airspeed		

