

Overview

PING-200Si is a complete system designed to meet the conspicuity requirements for operating UAS in controlled airspace.

This system includes an integrated, high integrity WAAS GPS sensor derived from uAvionix's TSO'd FYX technology, and a precision, temperature controlled, barometric sensor with accuracy beyond 80,000ft.



Features

- Mode S transponder.
- ADS-B 1090ES DF17 transmitter.
- Integrated WAAS GPS.
- Integrated static pressure sensor.
- Meets the performance requirements of TSO-C166b Class B1S and TSO-C199 Class A and B.
- Meets the ADS-B Out equipment performance requirements of 14 CFR 91.227.
- Meets the minimum performance requirements of the following RTCA specifications:
DO-181E Level 2e, Class 1
DO-260B Class B1S
- GPS/SBAS augmentation system. RAIM layer for Fault exclusion.
- Temperature controlled static pressure sensor accurate to 80,000ft.
- Battery backed GPS for fast TTFF.
- DO-160G environmental Cat B2.
- GDL90 compatible CONTROL serial input.
- MavLink compatible CONTROL serial input.
- Compatible with popular autopilots.
- GDL90 ownship and altitude packets.
- SMA 1030/1090MHz Antenna Connector.
- Integrated GPS antenna.
- US Patents Pending.

Regulatory

- FAA transmit license - manned aircraft and unmanned aircraft operating above 500ft AGL. FCC 47CFR part 87 ID=2AFFTP200S

Technical Specifications

Specification	Value
Input Power	11-33V 2.0W Ave On/Alt. 1W Standby
Size	57x90x19mm
Weight	80grams (Si)/ 76grams(Sr)
SIL/SDA	2/3
Operating Temp	-45 to 80°C
Transponder	
MTL 1030MHz	-81dBm
Dynamic Range	-79 to 0dBm
1090 Transmit Power	250W Nominal
WAAS GPS	
Augmentation	SBAS
Sensitivity	-167dBm
Altimeter	
Range	-1000 to 80,000ft
Fitting	3mm FESTO
Interfaces	
COM1	
Control	57600bps GDL 90/Mavlink
Ownship	57600bps GDL90/Mavlink
COM2	
Programming	115200bps GDL 90
Options	
Wi-Fi Programmer Adapter	
1030/1090MHz Transponder Antenna	

Electrical Specification

Host Interface

Pin	Type	Physical	Protocol
1	Ground		
2	NC	No Connection	
3	Aircraft Power	11-33V	
4	COM1 TX	RS232 57600bps	GDL 90 Ownship
5	COM1 RX	RS232 57600bps	GDL 90 Control
6	RS232 Ground		

Mating Connector: Molex 0436450600, Pins: 0462350001

Programming Interface

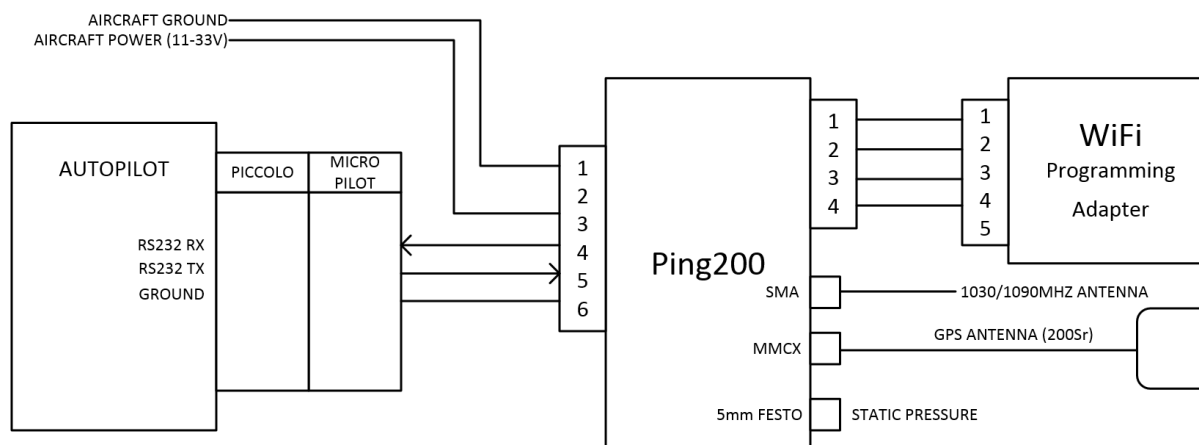
Pin	Type	Physical	Protocol
1	COM2 TX	3.3V Serial 115200bps	GDL 90
2	COM2 RX	3.3V Serial 115200bps	GDL 90
3	Power	5V Out	
4	Ground		

Mating Connector: JST ZHR-4, Pins: SZH-002T-P0.5

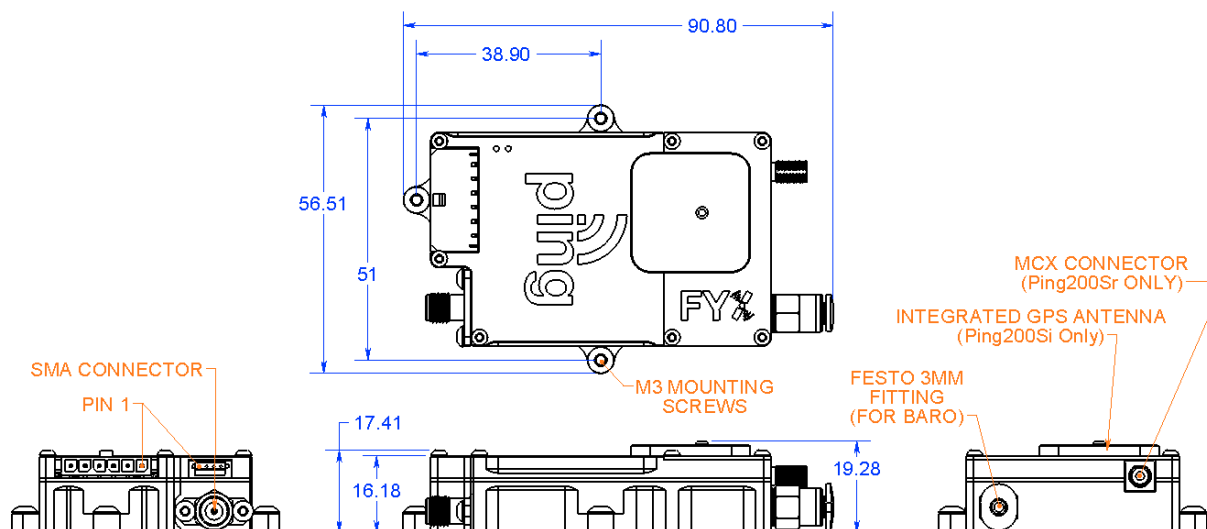
Indicators

LED	ON	FLASHING
GREEN	Powered	Receiving Interrogation
RED	FAULT	Reply / Transmit

Connections



Mechanical Specification



uAvionix reserves the right to alter product, services offerings, specifications, and pricing at any time without notice

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