

Overview

PING-200S is a complete system designed to meet the conspicuity requirements for operating UAS in controlled airspace. This system includes an integrated precision, temperature controlled, barometric sensor with accuracy beyond 80,000ft.



Features

- Mode S transponder.
- ADS-B 1090ES DF17 transmitter.
- Integrated static pressure sensor.
- Meets the performance requirements of TSO-C166b Class B1S and TSO-C199 Class A.
- 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 2els, Class 1
 - DO-260B Class B1S
- Temperature controlled static pressure sensor accurate to 80,000ft.
- DO-160G environmental Cat B2.
- GDL90 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 2W Ave On/Alt. <1W Standby
Size	91x57x17mm
Weight	73 grams
Operating Temp	-45 to 80°C
Transponder	
MTL 1030MHz	-74±3 dBm
1090 Transmit Power	250W Nominal
Altimeter	
Range	-1000 to 80,000ft
Fitting	3mm FESTO
Interfaces	
Control	
Control	57600bps GDL 90
Ownship	57600bps GDL90
Programming	
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

Mechanical Specification

