SWIWIN SW800Pro
Technical specifications

SWIWIN SW800Pro List of engine accessories

Serial number	Name	Picture specification	Quantity
1	Engine		one
2	ECU（V5）		one
3	GSU		one
4	Fixture		one
5	DB3 Power plug		one
6	DB15 Signal plug		one
7	Tubing	Φ10mm×Φ6.5mm（PU Tubing） Φ6mm×Φ4mm（PU Tubing） Φ4mm×Φ2.5mm（Teflon tubing）	2m

Technical parameter

Model	SW800Pro
Thrust	80kg
Diameter (mm)	207mm
Length (mm)	455mm
Weight	8400g
ECU weight	910g
Usage temperature	-40℃~50℃
Supply voltage	16V-32V
Starting system	One-button electronic start
Rpm Range	25000-65000
Exhaust Temperature	750℃
Fuel Consumption	1850g/min
Fuel	kerosene
Lube oil	3%~5%
Maintenance Interval	25H

Engine start parameters

Pump Voltage	0.6V-0.76V
RPM Start Up Ramp	100%
Pump Start Up Ramp	2
Glow Plug	5-7.6V
Valve	10-40
Ignition RPM	1300
Preheat RPM	2000
RPM Off Starter	13000

Engine operating parameters

RPM ACC	10
RPM DEC	10
Max RPM	65000
Idle RPM	25000
Minimum speed	15000
Max Temp	1000
Low Volt	10V
Restart	close
Restart Glow Plug	Consistent with the voltage of the burner
Pump Limit	20V
Idle Stable	5-8

Engine cooling parameters

cool	2000rpm

Starting motor parameters

Pop-up time	0.8S
Ejection voltage	5V
Run Voltage	2.5V
RPM Stable	20

Note: All data are measured at standard air pressure.

Control

1、Throttle signal

The throttle adopts the pulse width (PWM) control mode, the pulse width is 1ms~2ms, 1ms corresponds to the minimum throttle (0%), 2ms corresponds to the maximum throttle (100%), the pulse high level is 3.3V and 5V(3.3V and 5V are available on average), and the pulse low level is 0V.

2、Start switch

The start switch adopts the pulse width (PWM) control mode, the pulse width is 1ms~2ms, 1ms corresponds to off, 2ms corresponds to on, the pulse high level is 3.3V and 5V(3.3V and 5V can be used equally), and the pulse low level is 0V.

3、Telemetry data

① The engine has telemetry function, and data is transmitted through the 232 standard serial port, and the baud rate of the serial port can range from 9600 bps to 57600 bps.

② The data to be measured include but not limited to engine speed, engine throttle, oil pump voltage, engine state and error information.

③ The communication protocol of the data to be measured is open, and detailed communication protocol description documents are provided.
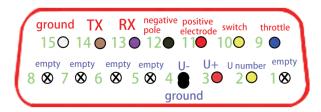
4、Data record

① The engine has the data recording function, which can record the data 2 hours before the engine failure.

② Data records include but are not limited to engine speed, engine throttle, oil pump voltage, engine status and error information.

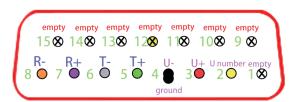③ Provide engine data analysis software to facilitate data analysis after flight.

Definition

1、DEFINITION OF RS232 SIGNAL INTERFACE

2：GSU data

3：GSU power supply positive

4：GSU negative power supply ground

9：PPM throttle

10：PPM switch

11：PPM power supply positive

12：PPM negative power supply

13：RX

14：TX

15：ground

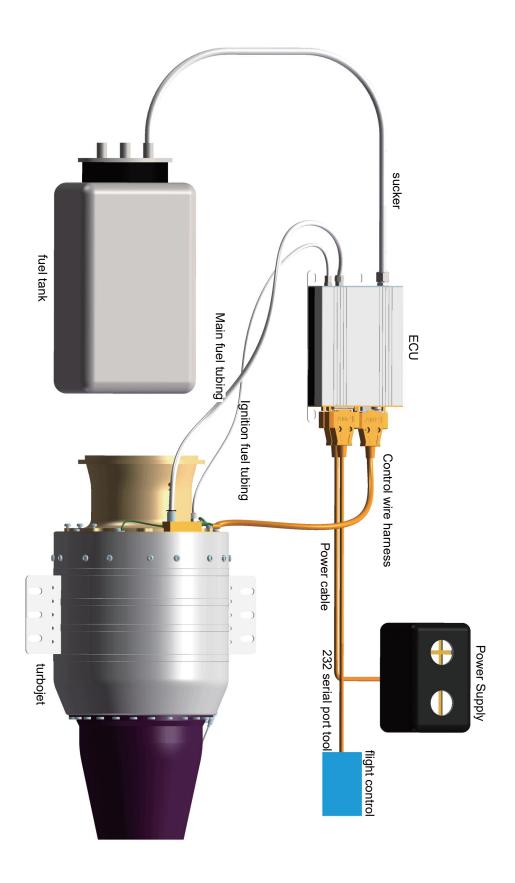## 2、RS422 SIGNAL INTERFACE DEFINITION

2：GSU data

3：GSU power supply positive

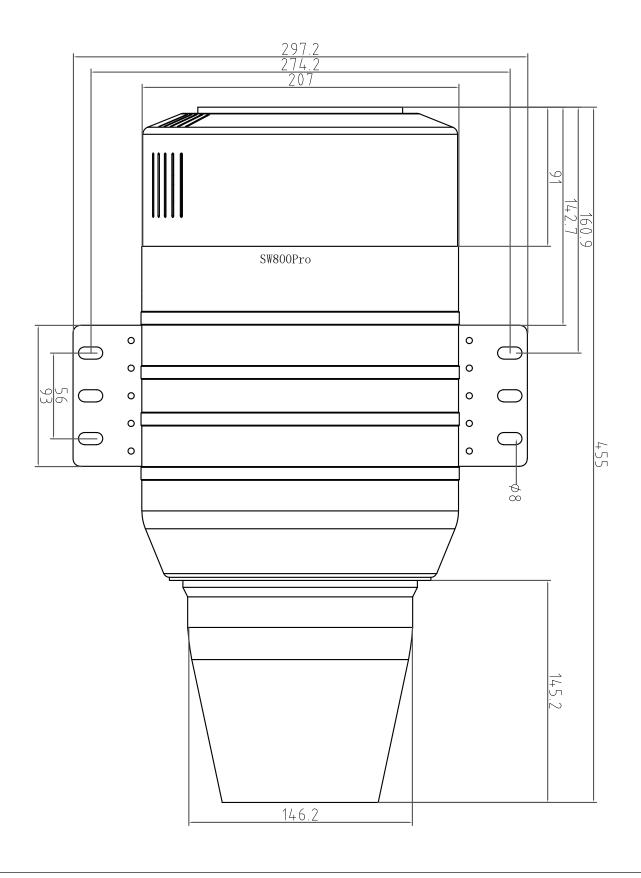4：GSU negative power supply ground wire

5：T+

6：T-

7：R+

8：R-

System connection diagram

fuel tank

sucker

ECU

Main fuel tubing

Ignition fuel tubing

Control wire harness

Power cable

232 serial port tool

Power Supply

flight control

turbojet

     SWIWIN TURBOJET EQUIPMENT CO.,LTD

Product dimension diagram

297.2
274.2
207
91
142.7
160.9
455
56
93
Ø8
145.2
146.2

SW800Pro

Disclaimer

This internal combustion engine is only used for Model RC,Toy aircraft as power source,it can only be used for model airplane flight,model airplane flying show and other entertainment activities.According to the Export control law of the People's Republic of China and the Export control law of the USA.It is strictly forbidden to modify the product for illegal use.It is strictly prohibited to resell the product to the export restricition country under the law in China.Otherwise,all consequences will be at your own risk.