

SWIWIN SW55B





Technical specifications

(A/0)



SWIWIN SW55B List of engine accessories

Serial number	Name	Picture specification	Quantity
1	Engine body		one
2	ECU (V3)		one
3	GSU		one
4	Fixture		one
5	Brushless fuel pump		one
6	Power cable		one
7	Signal cable		one

8	Throttle line		one
9	Switch valve		one
10	Filter		one
11	Tubing	 6mm*4mm	1.5m

Technical parameter

Model	SW55B
Thrust	5.5kg
Diameter (mm)	69.5mm
Length (mm)	175.2mm
Engine Weight	535g
ECU weight	42g
Usage temperature	-40°C~50°C
Supply voltage	3S Lipo battery
Starting system	One-button electronic start
Rpm Range	60000-170000
Exhaust Temperature	750°C
Fuel Consumption	190g/min
Fuel	kerosene
Lube oil	3%~5%
Maintenance Interval	25H

Engine start parameters

Pump Voltage	0.4V
RPM Start Up Ramp	100%
Pump Start Up Ramp	3
Glow Plug	6.6V
Valve	40~60
Ignition RPM	3000
Preheat RPM	14000
RPM Off Starter	35000

Engine operating parameters

RPM ACC	15
RPM DEC	15
Max RPM	170000
Idle RPM	60000
Minimum speed	35000
Max Temp	1000℃
Low Volt	10V
Restart	close
Restart Glow Plug	6.6V
Pump Limit	13V

Engine cooling parameters

Cool	5000rpm
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Starting motor parameters

Pop-up time	0.8S
Ejection voltage	4.5V
Run Voltage	4V

Note: All data are measured at standard air pressure;

When the ambient temperature is too high or the oxygen content in the air is low, too fast acceleration and deceleration will easily lead to flameout failure.

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.

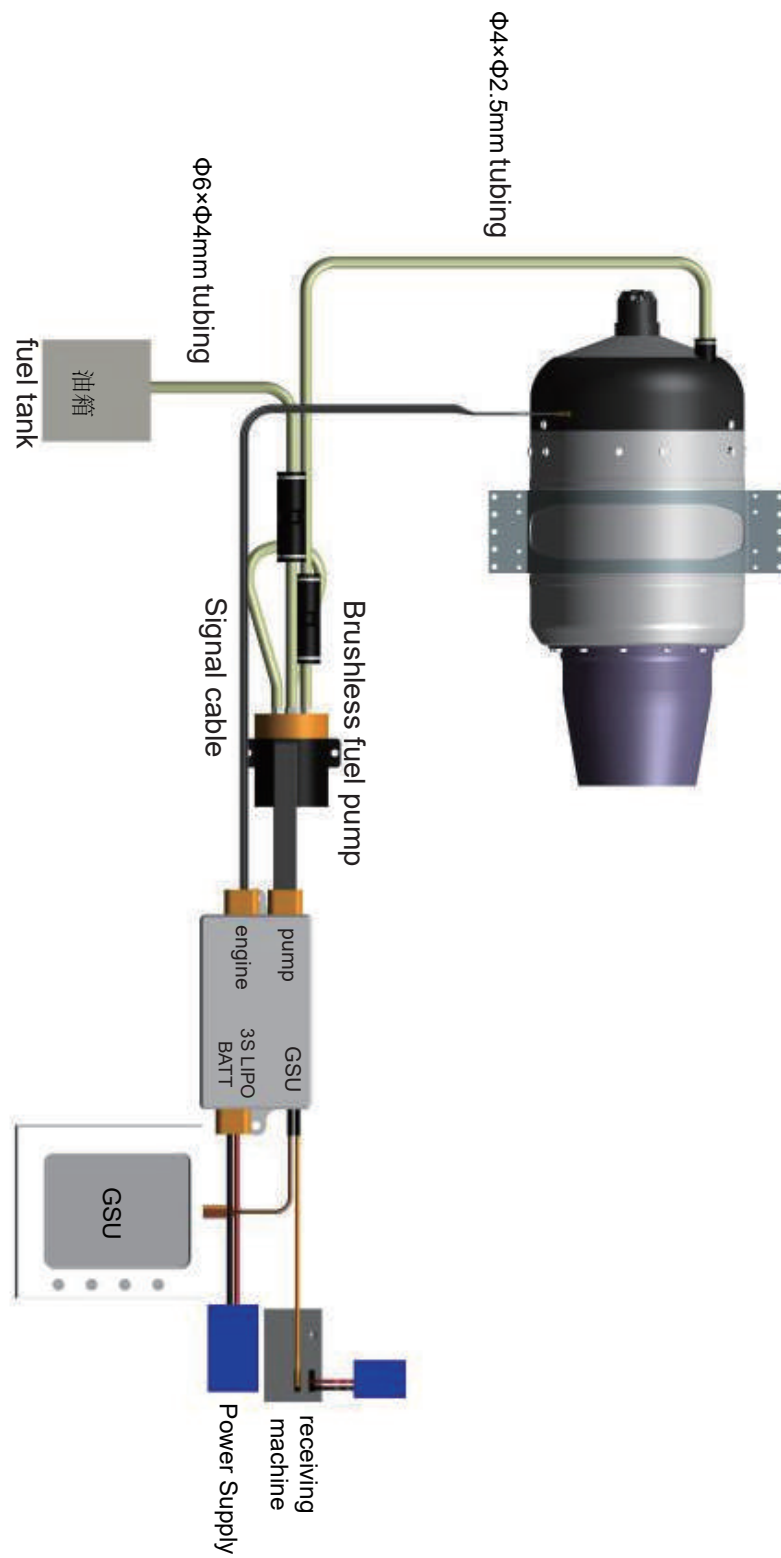
4、Data record

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

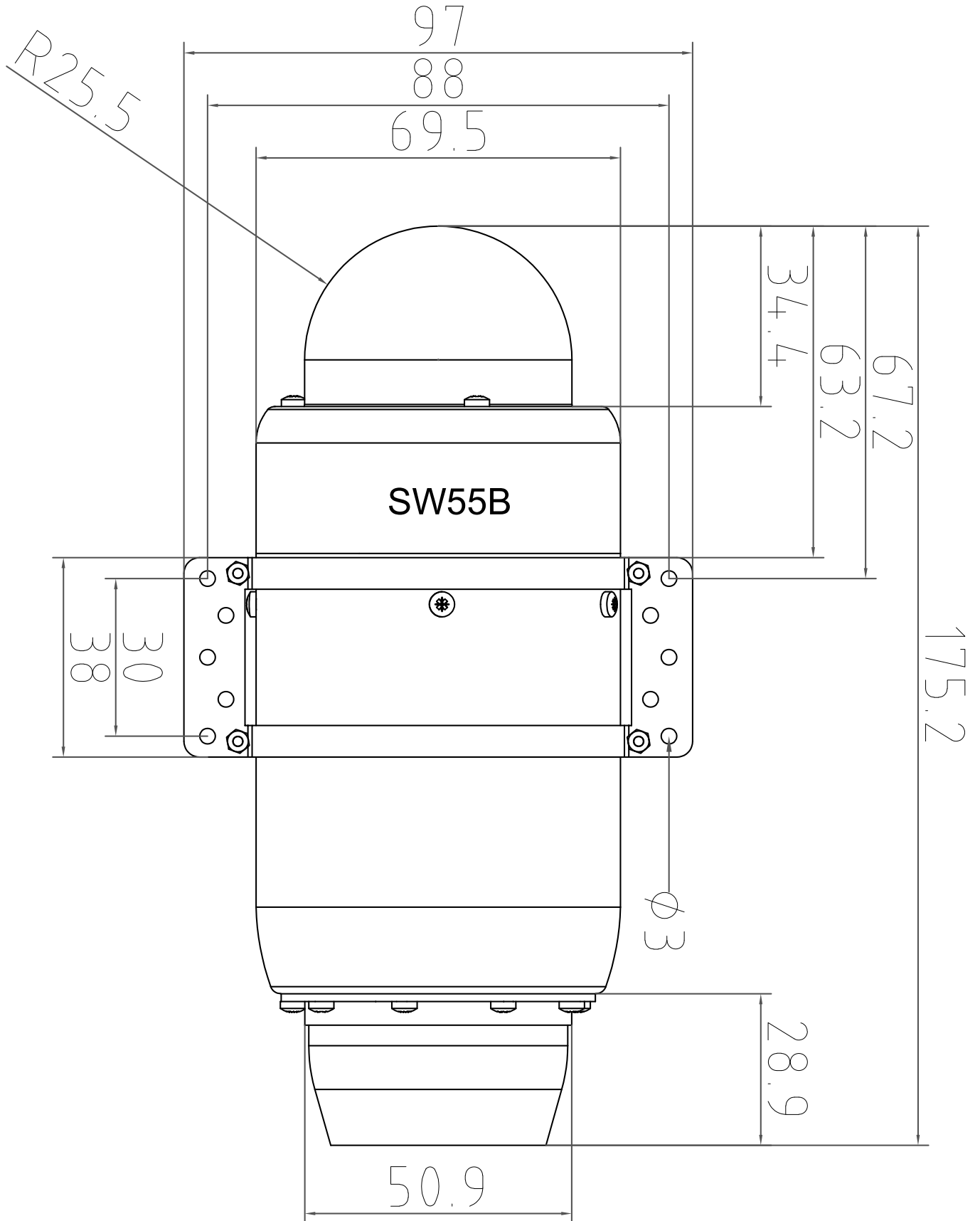
② Data records include but are not limited to engine speed, engine throttle, oil pump voltage, engine status and error information.

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

System connection diagram



Product dimension diagram



Disclaimer

This product is limited to use in entertainment and civil fields such as aerial model toy flying, competitions, performances, firefighting, road drying and cleaning.

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Otherwise, all consequences will be at your own risk.