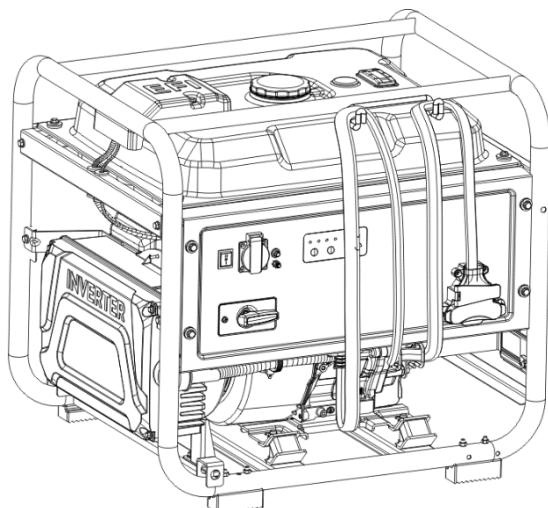


# 18S-9000W Smart fast charging station

Model: ZAM79F0-01 (Zhian New Energy 18S series smart battery dedicated)

Instructions for use



## **Disclaimer**

Thank you for purchasing a product from Shenzhen Zhian New Energy Technology Co.Ltd. Before using this product, please read and follow this document and all safety and compliance guidelines provided by Shenzhen Zhian New Energy Technology Co., Ltd. (Zhian New Energy), otherwise it may cause harm to you and the people around you, and damage the product or other surrounding items. Once you use this product, you are deemed to have read this document carefully, understood, recognized and accepted all the terms and contents of this document and all related documents of this product. You undertake to use this product only for legitimate purposes. You promise to take full responsibility for the use of this product and possible consequences. Zhian New Energy is not responsible for any damage, injury or any legal responsibility caused by the direct or indirect use of this product.

The final interpretation right of this document and all related documents of this product belongs to Zhian New Energy. Subject to update without notice.

## **Attentions**

1. Please read this instruction manual carefully before use. Failure to follow relevant instructions may result in property damage, personal injury or death. The warnings and precautions in this manual do not cover all possible situations. Users must understand the common sense of the product not mentioned in this manual and maintain a cautious operating attitude.
2. The engine has not been filled with engine oil before leaving the factory, please add engine oil with specification SJ 10W-40 before use.
3. The smart fast charging station needs to be placed on a horizontal platform. It should not be tilted. It should keep a distance of at least 1.5 meters from buildings or other devices. There must be sufficient ventilation distance around to ensure good ventilation when the product is working.
4. It is strictly forbidden to smoke near the fuel tank of the smart fast charging station, and keep away from other flames, sparks, etc.
5. Please choose to use the smart fast charging station in an open space, and ensure that there are no flammables or other objects near the muffler and exhaust port of the smart fast charging station to avoid fires.
6. Please keep the smart fast charging station clean and tidy. If there is spilled or leaked fuel or other flammables on the surface of the smart fast charging station, please wipe it with a dry towel in time.
7. Do not touch the engine or muffler and other parts on the smart fast charging station to avoid

burns when using.

- It is strictly forbidden to connect the smart fast charging station with the mains power supply or other smart fast charging stations, please use it alone.
- Please place this smart fast charging station out of the reach of passers-by and children.
- The warning signs and their meanings on the smart fast charging station are as follows, please pay attention:

 : 有毒气体 当心窒息

 : 当心触电

 : 有电危险

 : 当心火灾

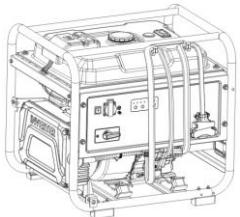
 : 当心烫伤

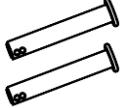
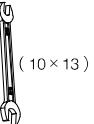
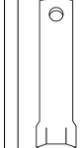
 : 添加机油

 : 添加燃油

- Before transportation, please ensure that there is no fuel or only a small amount of fuel in the fuel tank to avoid fuel spillage during transportation.
- Before use, please ensure that the terminals of each electrical component and the wiring harness are free from obvious defects such as damage and disconnection.
- Before use, please ensure that the smart fast charging station is connected to the ground wire, and use it in strict accordance with the instructions.
- Do not use this product indoors, in a closed space, in a rainy or humid environment.
- Please maintain the smart fast charging station regularly to prolong the service life of the smart fast charging station. For specific maintenance methods, please refer to the storage and maintenance chapter.

## 物品清单

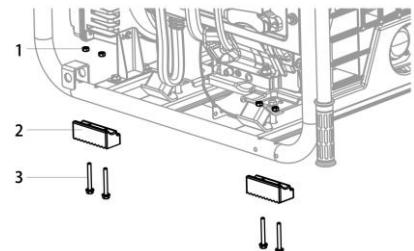
ZAM79D0-01 18S-9000W Smart fast charging station x1 	(选配) metal support x2  bolt (M6×45) x4  nut (M6) x4	(选配) wheel x2  circlip x2  axle x2 	(选配) handle x2  bolt (M8×50) x2   nut (M8) x2  
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Engine oil (1.1L)x2 	Wrench x2  ( 8×10 )  ( 10×13 )	Funnel x1 	Spark plug socket x1 

## Preliminary assembly

### 1) Remove the original support feet

If you need to install wheels and matching supporting feet, you need to first remove the 4 original supporting feet that come with the charging station from the factory.

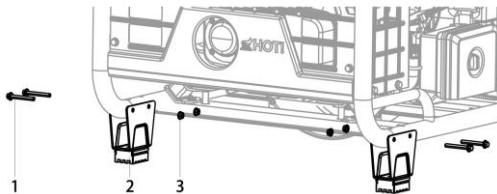


1. Nut
2. Original support feet
3. Bolt

### 2) Assemble the supporting feet

Align the support legs with the mounting holes of the support legs on the rack, then pass

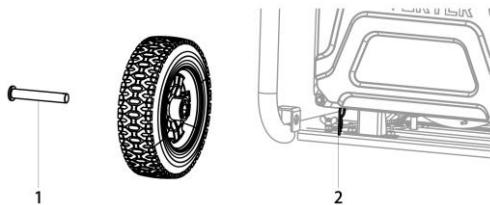
bolts through the mounting holes and secure with nuts.



1. Bolt
2. Supporting feet
3. Nut

### 3) Assemble the wheels

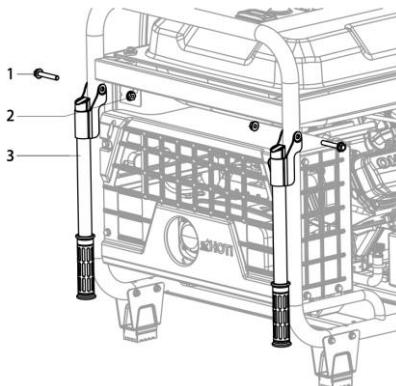
Pass the axle through the wheel and wheel mounting hole, and secure it with a circlip.



1. Axle
2. circlip

### 4) Assemble the handle

Align the push handle with the push handle mounting hole of the rack, pass the bolt through the push handle mounting hole, and secure it with a nut.



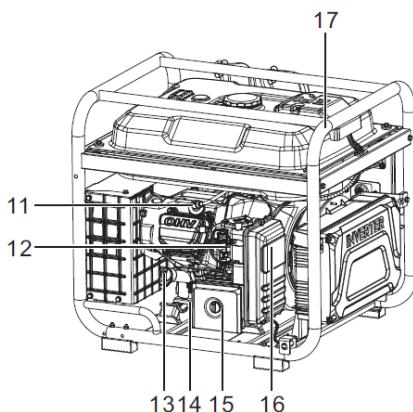
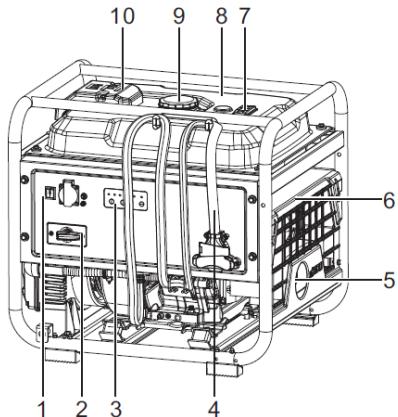
1. Nut

2. Handle
3. Bolt

## Instruction

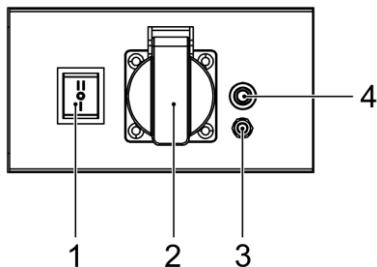
**ZAM79D0-01** 18S-9000W Smart fast charging station (hereinafter referred to as "smart fast charging station") is a high-power smart fast charging station that integrates power generation and charging functions. The engine fuel system adopts electronic injection technology, which saves more than 15% fuel than carburetor technology, with stable output and reliable performance. It can be connected to a Zhan 18S smart battery to charge it. It also supports a maximum of 1000 W AC output.

## Part Name



1. Control Panel	10. Fuel tank decorative panel
2. Start handle	11. Ignition coil
3. Display meter	12. ECU components
4. Battery charging cable	13. Engine oil dipstick
5. Spark arrestor	14. Oil drain pipe
6. Muffler cover	15. Primary air filter
7. Fuel label	16. Secondary air filter
8. Fuel tank	17. Rack
9. Tank cap	

## Control Panel



### 1. Main switch

Used to activate or deactivate the smart fast charging station. For specific startup and shutdown methods, see the related information in the usage chapter.

### 2. AC socket

It is used to connect electrical equipment and supports 220V AC output with a maximum power of 1000W. With waterproof function, waterproof grade IP44. When not in use, please fix the AC socket protective cover to the original position to protect the AC socket.

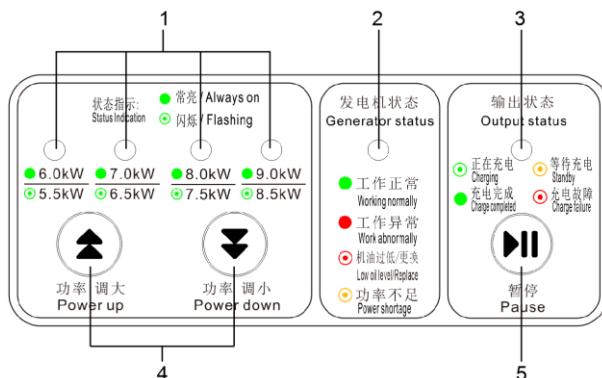
### 3. Ground terminal

It is necessary to use a cable to connect the ground terminal to the ground to avoid electric shock accidents due to device failure.

### 4. Oil reset button

Used to reset the oil warning light.

## The meter display



1. Power display LED lights
2. Generator status LED light

3. Output status LED lights
4. Power adjustment button
5. Pause button

LED	Flash mode	illustrate
Power display LED lights	6.0kW green LED always on	Power off 6.0kW
	5.5kW green LED flashing	Power off 5.5kW
	7.0kW green LED always on	Power off 7.0kW
	6.5kW green LED flashing	Power off 6.5kW
	8.0kW green LED always on	Power off 8.0kW
	7.5kW green LED flashing	Power off 7.5kW
	9.0kW green LED always on	Power off 9.0kW
	8.5kW green LED flashing	Power off 8.5kW
Generator status LED lights	Green LED always on	Normal operation
	Red LED always on	Abnormal work
	Red LED flashing	Insufficient oil
	Yellow LED flashing	Insufficient power
Output status LED lights	Green LED always on	Finished charging
	Green LED flashing	Charging
	Red LED flashing	Charging failure
	Yellow LED flashing	Waiting for charging



Scan the QR code on WeChat to enter the mini program, and then use the mini program to scan the QR code on the fuselage and connect to the machine via Bluetooth to read the information.

Remark:

- When the LED light flashes to indicate an alarm or failure, please use WeChat to scan the QR code of the mini program, and then use the mini program to scan the QR code of the fuselage. Connect to the smart fast charging station via Bluetooth, and view detailed fault

information on the mini program .

- When the red light of the generator status LED flashes to indicate that the engine oil is too less and needs to be maintained, after changing the oil, restart the generator and the red light flashes and disappears
- When the smart fast charging station module is abnormal or damaged, it is recommended that the user contact Zhian New Energy after-sales service or an agent authorized by Zhian New Energy to repair or replace the faulty module.

## Preparation

### Add engine oil

The smart fast charging station is not filled with engine oil when it leaves the factory, and must be filled with engine oil before use.

After placing the smart fast charging station on a horizontal surface, unscrew the oil dipstick, inject rated capacity oil, and then tighten the oil dipstick.

18S-9000W intelligent DC generator rated engine oil filling volume is 1.1 L. SJ 10W-40 type engine oil is recommended.

### Refueling

Fuel is flammable and explosive, please use it strictly according to the instructions. The smart fast charging station must stop running before refueling, and refuel after the smart fast charging station cools down.

1. Unscrew the fuel tank cap, and fill the fuel tank with 92# or above grade gasoline with rated capacity according to the fuel level indication on the oil mark. The rated fuel filling capacity of the 18S-9000W smart fast charging station is 36 L.
2. After filling fuel, be sure to tighten the fuel tank cap. If fuel spills, be sure to wipe clean with a dry towel.

### Remark:

- Do not overfill the fuel tank, otherwise it may cause fire or even explosion due to overflow.
- Before adding engine oil and fuel, the smart fast charging station cannot be powered on, otherwise the electronic fuel pump will be easily damaged.

## Operation

### Start the smart fast charging station

1. Before starting, do not connect any electrical equipment.

2. Make sure the engine has been filled with oil and the fuel tank has been filled with fuel (minimum fuel capacity  $\geq 1L$ )
3. Connect the battery charging cable to the smart battery, the smart battery must be off at this time. Short press and then long press the power button of the battery to turn on the battery. 18S-9000W intelligent DC generator can be connected to Zhian 18S intelligent battery (ZAB1830/ZAB1820 series batteries)
4. Press the main switch of the smart fast charging station to the "Start" position for at least 3 seconds and then release it, let the main switch automatically bounce back to the "Run" position, and the smart fast charging station will start by itself.
5. After startup, the smart fast charging station starts charging the battery. During the charging process, the 4 LED lights of the battery flash in sequence. When the 4 LED lights of the battery turn solid and the battery power reaches about 95%; when the output status light turns solid green, you can press the pause button, disconnect the battery from the battery charging cable, and then connect the next battery for charging.

**Remark:**

- Before connecting the smart battery, make sure that the battery is powered off;
- Each time the main switch is pressed to "Start", the smart fast charging station will automatically start up to 3 times, with an interval of 5 seconds between each start. If the smart fast charging station still fails to start or stalls after starting after 3 automatic starts, please contact after-sales service.
- During the battery charging process, if other electrical equipment is connected to the AC socket, the battery charging power will be reduced accordingly and the charging time will be extended accordingly.

**Turn off the smart fast charging station**

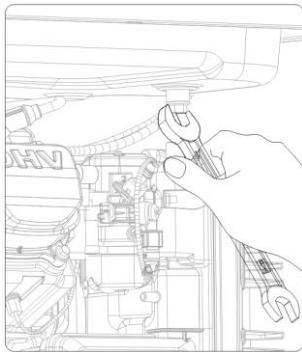
1. Turn off all connected electrical equipment first, and then disconnect the electrical equipment from the smart fast charging station.
2. Press the main switch to the "OFF" position, and the smart fast charging station will stop running.

## **Storage and Maintenance**

### **Storage Smart Fast Charging Station**

If you want to store the smart fast charging station for a long time (more than 30 days), please follow the steps below:

1. Before storing, you need to start the smart fast charging station and turn it off after running for 5 to 10 minutes. When the smart fast charging station is warm, proceed to the next step to drain the oil.
2. Remove the oil drain pipe, turn it counterclockwise, open the oil drain pipe cap, and then drain all the oil in the engine block.
3. Fix the oil drain pipe to its original position, then tighten the oil drain pipe cap clockwise.
4. Unscrew the drain bolt at the bottom of the fuel tank, drain the fuel in the tank through the drain bolt at the bottom of the fuel tank, and use a funnel to drain the fuel into a special fuel tank for storage to prevent the formation of colloids. Please clean and dry the funnel after use. At the same time, press the lock on the high-pressure fuel pipe connector, remove the high-pressure fuel pipe, turn the high-pressure fuel pipe connector upside down, drain the fuel in the pipe, and then assemble it back.
5. After the engine has completely cooled down, remove the spark plug, add about 5 ml of clean engine oil to the combustion chamber, and then install the spark plug back to its original position.
6. Place the smart fast charging station in a cool, dry and clean place.



### **Maintain smart fast charging stations**

Please scan the QR code above the fuel tank to get a video operation tutorial, or view the decal instructions on the body of the smart fast charging station.

Smart fast charging stations require regular inspection and maintenance to ensure they are in good condition. Before maintenance, be sure to turn off the smart fast charging station, disconnect all electrical devices and smart batteries, and allow the smart fast charging station to cool down completely.

Perform maintenance in a clean, dry and flat area to ensure that the smart fast charging station does not move unexpectedly.

Follow the maintenance intervals specified in the table below. When the smart fast charging station is operating under harsh conditions, please increase the frequency of maintenance. For maintenance items not covered in this article, please contact Zhian New Energy after-sales service or Zhian New Energy authorized agent.

Project		First using	10hours	20hours	50hours	100hours
Engine oil	Check oil level	√				
	Change			first time using	√	
Air filter foam element	Check/Clean		√			
Air filter paper element	Check		√			
	Change					√
Spark plug	Check/Clean					√
Spark arrestor	Clean					√
Fuel pipe	Check	Every 2 years (replace if necessary)				

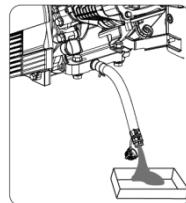
**Remark:**

- The smart fast charging station requires 20 hours of oil change for the first time, and every 50 hours for subsequent use (when the environment is sandy and dusty, it is recommended to change the oil every 20 hours)
- If the spark plug insulator is cracked or the sealing gasket is damaged, please promptly contact the agent of the drone manufacturer you purchased or the corresponding after-sales service for replacement, and make sure to use the original model spark plug (F7RTC)
- Contact the UAV manufacturer's agent or the UAV agent's maintenance point after-sales service to adjust the valve clearance after every 300 accumulated working hours. Private adjustment of the valve clearance is strictly prohibited.
- Every maintenance needs to be cleaned and inspected. When inspecting the appearance, confirm whether there is any rust, broken structural parts, damage, deformation, looseness, etc. If any abnormality is found, repair and replace it in time. .

- Check whether the smart fast charging station is leaking, including fuel and oil leaks.

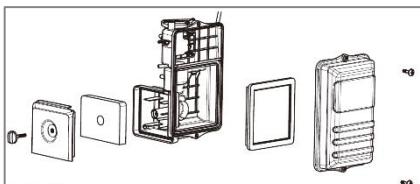
## Engine oil change

1. Place the smart fast charging station on a horizontal surface and start running for 5 to 10 minutes and then turn off the smart fast charging station. When the smart fast charging station is warm, proceed to the next step to drain the engine oil.
2. Place an oil container under the smart fast charging station and place it under the oil drain pipe.
3. Remove the oil drain pipe, turn it counterclockwise, open the oil drain pipe cap, and then drain all the oil in the engine block.
4. Fix the oil drain pipe to its original position, then tighten the oil drain pipe cap clockwise.
5. Remove the oil dipstick and add 1.1L of SJ 10W-40 model oil or to the upper limit of the oil scale, then tighten the oil dipstick completely.



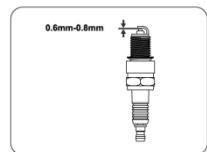
## Check and clean air filter element

1. Remove the first-level air filter cover and foam filter element, clean the foam filter element and let it dry, clean the dust in the air filter cover, then install the foam filter element into the first-level air filter, and replace it with the first-level air filter in its original position. air filter cover.
2. Remove the secondary air filter cover and paper filter element. If the surface of the paper filter element is wetted by engine oil or gasoline, or the paper filter element is obviously stained and discolored (the discolored area exceeds 10%), please replace the paper filter element. Also clean the dust inside the air filter cover.
3. Install the dry paper filter element into the secondary air filter, and replace the secondary air filter cover in its original position.



## Check spark plug

1. Use a special spark plug sleeve to remove the spark plug and visually inspect it. If the insulator is cracked or the sealing gasket is damaged, please contact the drone manufacturer's agent or the drone agent's after-sales service center for replacement.
2. Use a hard metal brush to remove carbon deposits and other sediments.
3. Adjust the bent side electrode to ensure that the spark plug gap is within the standard range (0.6~0.8 mm)
4. When installing the spark plug back into the engine, you need to pre-tighten the spark plug with 2 to 3 threads by hand.
5. After the spark plug is fixed, tighten it firmly with the spark plug sleeve.



**Remark: Spark plug tightening torque: 20~24 N.m**

## 规格参数

Model	ZAM79D0-01
Start method	Electric start
Working temperature	-5~40°C
Maximum working altitude	1000 m (The power will drop when used above 1000 m above sea level.)
Rated engine speed	2200~4000 RPM
Fuel type	92# gasoline or above grade
Engine oil type	Engine oil SJ 10W-40
Fuel tank capacity	36 L
Engine oil capacity	1.1 L
Rated output	DC: 45.0~78.3V 130A (Max.) 9000W(Max.) AC: 220 V 1000W(Max.)
AC rated power	1000 W
Rated total output power	9000 W
Engine max output power	12000 W

Compatible battery model	Zhian New Energy 18S series smart battery
Dimension	700±5 x 595±5 x 620±5 mm
Weight	72±1kg