

One of the best infrared equipment preferred by automobile manufacturer's world wide.



providing solutions to customers worldwide

CHARGER POWER SUPPLY

INVERTER INTELLIGENT BATTERY CHARGER AND
POWER SUPPLY FOR ECU PROGRAMMING

CE

ISO 9001:2015

2024

Equipment subject to change without notice. This catalogue is for
reference only. The actual products serve as standard (2024 Version)



ZHUHAI FLY-EAGLE ELECTRICAL APPLIANCE CO., LTD.
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About us



Our products are preferred by the following car manufacturers' service workshops in China



COMPANY PROFILE

Zhuhai Fly-Eagle Electrical Appliance Co Ltd has been awarded the "Zhuhai Science and Technology Enterprise" and "Zhuhai Credible Enterprise" awards, and is a governing body of the "China Automobile Maintenance Equipment Association".

With a modern factory of 65,000 square meters and eight branches nationwide, the company has successively passed ISO9001: 2015 quality system certification and a series of certificates, such as China Compulsory CCC, European Union CE, and design patents, with strong technical force and advanced production and testing equipment.

All our products are designed in strict accordance with international IEC and national GB and other relevant standards, and have been approved for use by 35 well-known brands of car manufacturers 4S Stations.

FY-TECH with excellent product quality, leading innovative technology, quality after-sales service, professional manufacturing concepts and strong strength to win the trust of all users, and with a number of overseas customers to establish a long-term OEM partnership, together to create an international quality.

FY-TECH is dedicated to the auto repair equipment industry, based on the company's bigger, stronger, more specialised development ideas to create an international brand FY-TECH with the concept of each product use in the whole life cycle.

CE marking is the mandatory conformity mark for products placed on the market in the European Economic Area (EEA) and confirms that the product complies with all the legal requirements and ensures validity so the product can be sold. This includes four basic requirements for mechanical and electrical products which are safety, health, environmental protection and customer protection. In conforming to the requirements, a level of safety is ensured for the products that enter into the European market.



A quality management system (QMS) is a collection of business processes focused on achieving quality policy and quality objectives to meet customer requirements. The Process Based QMS enables the organizations to identify, measure, control and improve the various core business processes that will ultimately lead to improved business performance.

Enhance Technology and Promote Innovation

In the process of continuous development, FY-TECH always put scientific research and technological innovation as our number one enterprise strategy priority. With the professional research and development team, we have the ability to develop software and hardware independently that is the wings of FY-TECH for taking off. FY-TECH patent products such as water-cooled IGBT inverter spot welders, IGBT inverter MIG welders, shortwave infrared pain curing lamps, dent pulling machines and car body repair systems, have been widely used in the industry. Comparing with traditional repair techniques, FY-TCH products are more efficient, saving energy consumption of more than 50%.Optimize equipments for best performance.

Right tool for the right job

FY-TECH has invested heavily in importing high standard processing equipments such as advanced circuit board welding, testing and producing equipment, Dutch DLM CNC shearing equipment, Germany FLK CNC punching equipment, Dutch DLM CNC bending equipment, Taiwan KND NC lathe, American ATF CNC water jet cutting equipment, etc. The division of different production lines for spot welding machines, MIG welding machines, infrared curing lamps, battery chargers and tool cabinets ensures the effective and orderly production. Advanced quality control equipment and professional quality control staff strictly control every process and every machine, providing a reliable guarantee for high quality.

Provide superior quality products to win market share

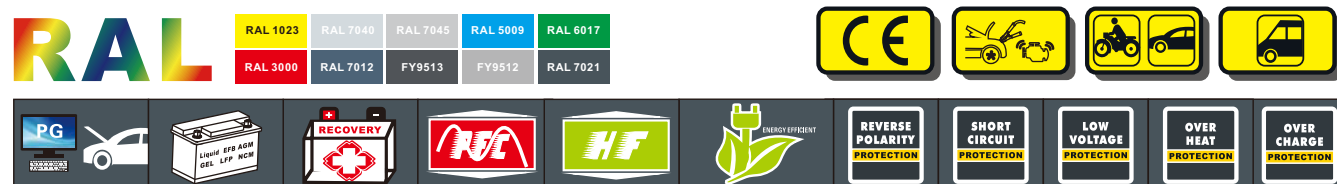


35 CAR MANUFACTURERS DESIGNATED EQUIPMENT. EXPORTS MORE THAN 50 COUNTRIES AND REGIONS. GLOBAL QUALITY TRUST



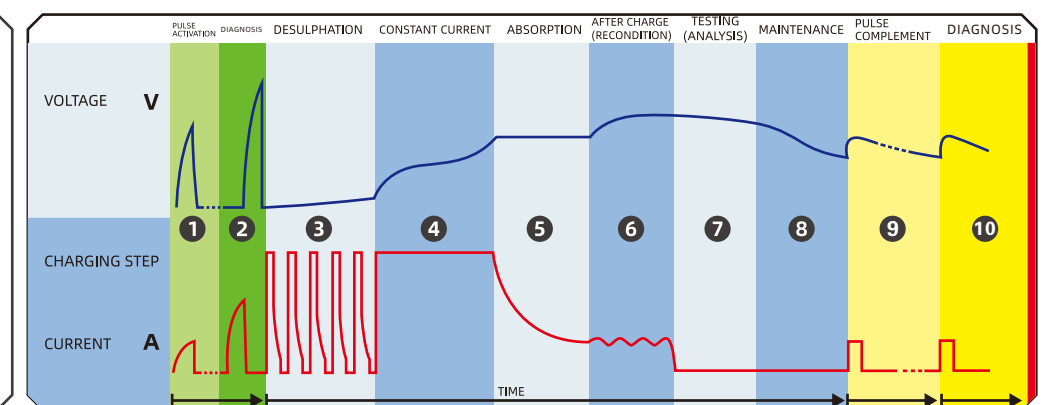
FOCUS ON COLLISION REPAIR GLOBAL FY-TECH

FY-150LFP



- The Intelligent Programming Battery Charger and Power Supply FY-150LFP features a world-renowned brand of colored LCD display with automatic diagnosis, automatic maintenance, and charging and repairing according to the health status of the battery.
- Jump starting a car battery available. Pulse charging of the battery inside or outside the car.
- With advanced automatic battery repair technology, allows you to diagnose, charge and repair different types of batteries. Suitable for use in garages, service workshops.. etc.
- A new generation of essential equipment to avoid damage to ECU due to voltage variations when servicing, diagnosing and programming the ECU for late model vehicles.
- Multi-stage charging various types of batteries - Lead-acid, EFB, AGM, GEL, LFP (LiFePO4)) and NCM (NiCoMn).
- Multiple modes of operation include automatic diagnosis, charging, showroom, programming , automatic repair of faulty batteries and jump-starting car batteries.
- Extensive safety and protection features include overheat, overcharge, short-circuit and reverse polarity protections, and disconnect clamp alarm.
- Unique multi-stage charging curve for all types of batteries. Non-sparking technology.
- Selectable voltage from 12-14.8V for reprogramming /reflashing.

Simultaneously diagnoses battery condition during the 10-stage charging process to ensure effective battery activation and recovery of failed batteries.



Model	Input Voltage	Input Power	Maximum Output Current	Output Voltage
FY-150LFP	220V ± 15%	2700W	150A	12-14.8V
Battery Capacity	Cart Size	Cart Weight	Main Unit Size	Main Unit Weight
10~1800Ah	53.6X52X123.5cm	27kg	46X34X14cm	9kg

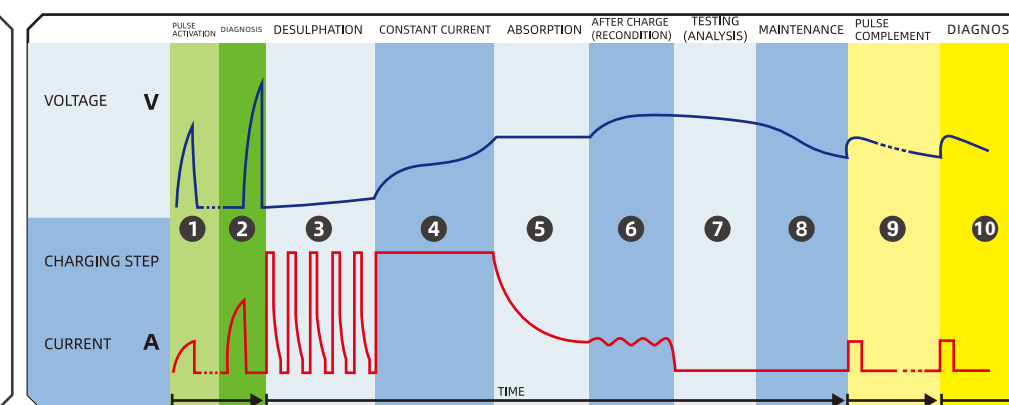
FY-130A



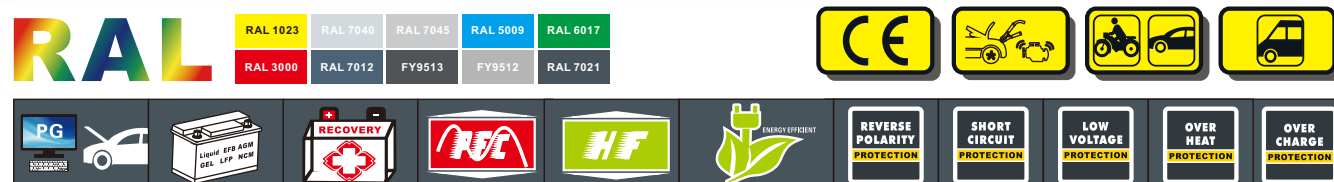
- The Intelligent Programming Battery Charger and Power Supply FY-130A features a world-renowned brand of colored LCD display with automatic diagnosis, automatic maintenance, and charging and repairing according to the health status of the battery.
- Jump starting a car battery available. Pulse charging of the battery inside or outside the car.
- With advanced automatic battery repair technology, allows you to diagnose, charge and repair different types of batteries. Suitable for use in garages, service workshops.. etc.
- A new generation of essential equipment to avoid damage to ECU due to voltage variations when servicing, diagnosing and programming the ECU for late model vehicles.
- Multi-stage charging various types of batteries - Lead-acid, EFB, AGM, GEL, LFP (LiFePO4)) and NCM (NiCoMn).
- Multiple modes of operation include automatic diagnosis, charging, showroom, programming , automatic repair of faulty batteries and jump-starting car batteries.
- Extensive safety and protection features include overheat, overcharge, short-circuit and reverse polarity protections, and disconnect clamp alarm.
- Unique multi-stage charging curve for all types of batteries. Non-sparking technology.
- Selectable voltage from 12-14.8V for reprogramming /reflashing.



Simultaneously diagnoses battery condition during the 10-stage charging process to ensure effective battery activation and recovery of failed batteries.



Model	Input Voltage	Maximum Output Current	Output Voltage
FY-130A	220V ± 15%	130A	12~14.8V
Battery Capacity	Input Power	Main Unit Size	Main Unit Weight
10~1800Ah	2100W	340X408X136mm	9kg



INTELLIGENT CAR BATTERY CHARGER AND
POWER SUPPLY FOR ECU PROGRAMMING

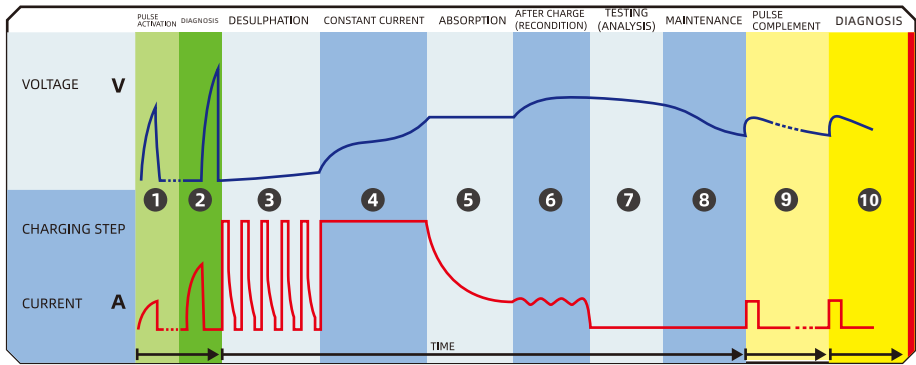
FY-110A



Product Information

- The Intelligent Programming Battery Charger and Power Supply FY-110A features a world-renowned brand of colored LCD display with automatic diagnosis, automatic maintenance, and charging and repairing according to the health status of the battery.
- Pulse charging of the battery inside or outside the car.
- With adjustable current and voltage function.
- With advanced automatic battery repair technology, allows you to diagnose, charge and repair different types of batteries. Suitable for use in garages, service workshops.. etc.
- A new generation of essential equipment to avoid damage to ECU due to voltage variations when servicing, diagnosing and programming the ECU for late model vehicles.
- Multi-stage charging various types of batteries - Lead-acid, EFB, AGM, GEL, LFP (LiFePO4)) and NCM (NiCoMn).
- Multiple modes of operation include automatic diagnosis, charging, showroom, programming , automatic repair of faulty batteries and jump-starting car batteries.
- Extensive safety and protection features include overheat, overcharge, short-circuit and reverse polarity protections, and disconnect clamp alarm.
- Unique multi-stage charging curve for all types of batteries. Non-sparking technology.
- Selectable voltage from 12-14.8V for reprogramming /reflashing.
- Ten-stage intelligent charging: Pulse activation, test, desulphation , constant current, absorption, repair, analysis, maintenance, pulse complementary, stop charging.

Unique Intelligent Charging Curve



Simultaneously diagnoses battery condition during the 10-stage charging process to ensure effective battery activation and recovery of failed batteries.



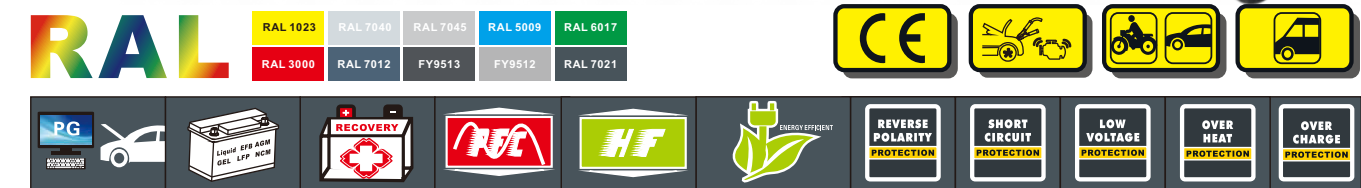
Technical data

Model	50/60Hz	Input power	I _{RMS}	Maximum Output Current	Ah	charging cable	Main Unit Size	Main Unit Weight
FY-110A	AC220V ± 15%	1760W	110A	12-16V	10~1200Ah	L-3m 16mm²	305x390x140mm	7.8kg



INTELLIGENT CAR BATTERY CHARGER AND
POWER SUPPLY FOR ECU PROGRAMMING

FY-100LFP



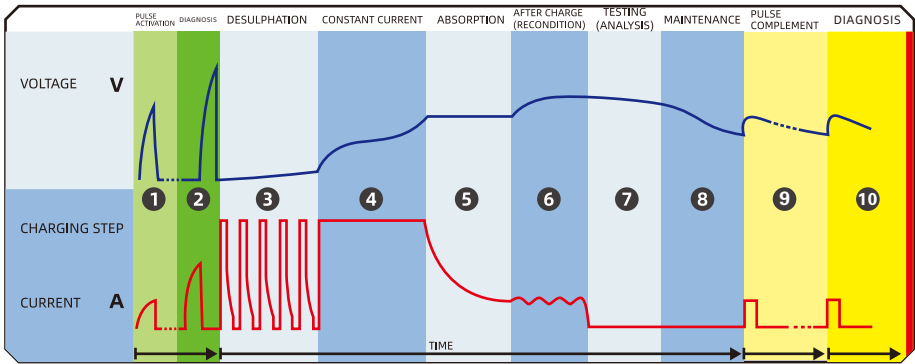
Product Information

- The Intelligent Programming Battery Charger and Power Supply FY-100LFP features a world-renowned brand of colored LCD display with automatic diagnosis, automatic maintenance, and charging and repairing according to the health status of the battery.
- Jump starting a car battery available. Pulse charging of the battery inside or outside the car.
- With adjustable current function.
- With advanced automatic battery repair technology, allows you to diagnose, charge and repair different types of batteries. Suitable for use in garages, service workshops.. etc.
- A new generation of essential equipment to avoid damage to ECU due to voltage variations when servicing, diagnosing and programming the ECU for late model vehicles.
- **Multi-stage charging various types of batteries - Lead-acid, EFB, AGM, GEL, LFP (LiFePO4)) and NCM (NiCoMn).**
- Multiple modes of operation include automatic diagnosis, charging, showroom, programming , automatic repair of faulty batteries and jump-starting car batteries.
- Extensive safety and protection features include overheat, overcharge, short-circuit and reverse polarity protections, and disconnect clamp alarm.
- Unique multi-stage charging curve for all types of batteries. Non-sparking technology.
- Selectable voltage from 12-14.8V for reprogramming /reflashing.
- Ten-stage intelligent charging: Pulse activation, test, desulphation , constant current, absorption, repair, analysis, maintenance, pulse complementary, stop charging.



Unique Intelligent Charging Curve

Simultaneously diagnoses battery condition during the 10-stage charging process to ensure effective battery activation and recovery of failed batteries.



Technical data

Model	50/60Hz	Input power	I _{RMS}	Maximum Output Current	Ah	charging cable	Cart Size	Cart Weight	Main Unit Size	Main Unit Weight
FY-100LFP	AC220V ± 15%	1200W	100A	12-16V	10~1200Ah	L-3m 16mm²	48x60x130cm	13kg	Main machine 33x21x12cm	4kg
FY-70LFP	AC220V ± 15%	850W	70A	12-16V	10~1000Ah	L-3m 10mm²	48x60x130cm	13kg	Main machine 33x21x12cm	3.8kg
FY-50LFP	AC220V ± 15%	600W	50A	12-16V	10~600Ah	L-3m 6mm²	48x60x130cm	13kg	Main machine 33x21x12cm	3.5kg

Inverter intelligent programming
battery charger and power supply

FY-150A-12H



- Pothook
- For laptop
- Laptop lock (optional)
- Power Adapter (optional)
- For diagnostic tools
- For programming power supply
- For accessories
- For battery
- Drawer (optional)



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Trolley(optional)



Product Information

- The FY-150A-12H Intelligent Programming Battery Charger and Power Supply features auto diagnosis, auto maintenance, and charge and repair based on battery condition.
- Jump starting a car battery available.Pulse charging of the battery inside or outside the car.
- With advanced automatic battery repair technology, allows you to diagnose, charge and repair different types of batteries. Suitable for use in garages, service workshops.. etc.
- A new generation of essential equipment to avoid damage to ECU due to voltage variations when servicing, diagnosing and programming the ECU for late model vehicles.
- **Multi-stage charging various types of batteries - Lead-acid, EFB, AGM, GEL, LFP (LiFePO4)) and NCM (NiCoMn).**
- Multiple modes of operation include automatic diagnosis, charging, showroom, programming , automatic repair of faulty batteries and jump-stating car batteries.
- Extensive safety and protection features include overheat, overcharge, short-circuit and reverse polarity protections, and disconnect clamp alarm.
- Unique multi-stage charging curve for all types of batteries. Non-sparking technology.
- Selectable voltage from 12-14.8V for reprogramming /reflashing.
- Ten-stage intelligent charging: Pulse activation, test, desulphation , constant current, absorption, repair, analysis, maintenance, pulse complementary, stop charging.

Technical data

Model	Input Voltage	Input Power	Maximum Output Current	Output Voltage
FY-150A-12H	220V ± 15%	1800W	150A	12-14.8V
Battery Capacity	Cart Size	Cart Weight	Main Unit Size	Main Unit Weight
10~1800Ah	59X65X125cm	38kg	43X35X14cm	8.7kg



Inverter intelligent programming battery charger and power supply

FY-100A-12H



Pothook

For laptop

Laptop lock (optional)

Power Adapter (optional)

For diagnostic tools

For programming power supply

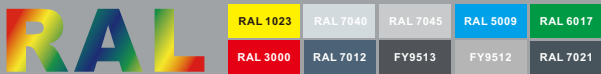
For accessories

For battery

Trolley(optional)



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Features

1. Automatic diagnosis, automatic maintenance, and charging and repairing according to the health status of the battery.
2. Pulse charging of the battery inside or outside the car.
3. Applicable for the batteries of Lead-acid, EFB, AGM and , GEL
4. Multiple modes of operation include automatic diagnosis, charging, showroom, programming , automatic repair of faulty batteries and jump-starting car batteries.
5. With the protection functions of unconnected battery alarm, overload, overheat, overcharge, short circuit, polarity reversal, etc.
6. Non-sparking tech, applicable for the dedicated charging curves for all battery technologies.
7. According to different car models, the voltage value of programming mode can be adjusted (13.5~14.8V).
8. Ten-stage intelligent charging: Pulse activation, test, desulphation , constant current, absorption, repair, analysis, maintenance, pulse complementary, stop charging.

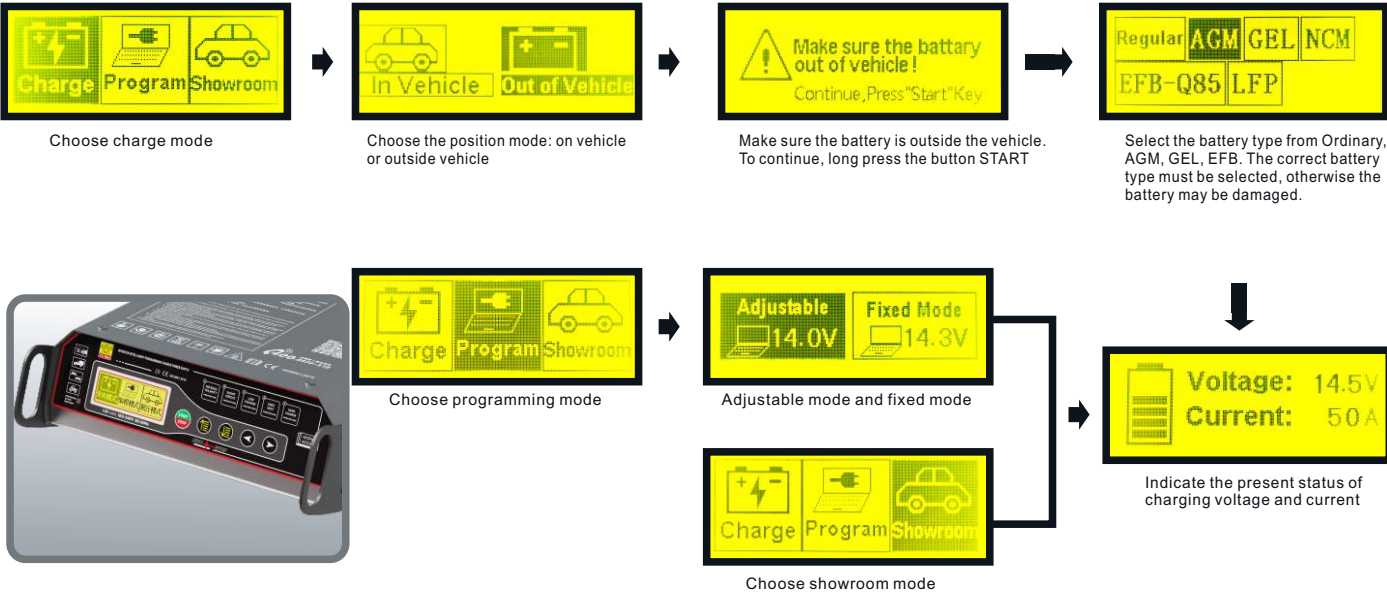
Technical data

Model	50/60Hz	Input power	I _{RMS}	V	PG → VA	Ah	L	cm	kg
FY-150A-24/12H	AC220V ± 15%	3600W	150A	12/24V	2~32V/2~150A	10~2000Ah	L-3m 10mm ²	Main machine 43x35x14	8.8kg
FY-100A-24/12H	AC220V ± 15%	2700W	100A	12/24V	2~32V/2~100A	10~1800Ah	L-3m 10mm ²	Main machine 43x35x14	8.7kg
FY-70A-24/12H	AC220V ± 15%	1680W	70A	12/24V	2~14.8V/2~70A	10~1500Ah	L-3m 10mm ²	Main machine 35x32x14	6.2kg
FY-100A-12H	AC220V ± 15%	1200W	100A	12V	2~14.8V/2~100A	10~1200Ah	L-3m 16mm ²	Main machine 43x35x14	8.5kg
FY-70A-12H	AC220V ± 15%	850W	70A	12V	2~14.8V/2~70A	10~1000Ah	L-3m 10mm ²	Main machine 35x32x14	6kg

Inverter intelligent programming battery charger and power supply

Features

- Inverter energy efficient battery charger is a new kind of advanced pulse battery charger which comes with yellow-green backlit LCD display and can automatically detect, analyze, charge and maintain batteries, and intelligent programming.
- Over-voltage and over-current protection, power down alarm, short circuit protection, reverse polarity protection, high temperature alarm and auto repair battery during charging process.
- Detect, analyze, charge and maintain different types of batteries, applying to advanced charging devices at garages and repair workshops.
- Used in the maintenance, detection and electronic control system programming process of cars in static state to prevent damage of control elements and loss of data caused by cars running out of battery during programming or other detection processes.
- With reverse connection reminder and no touch spark, the charger is applicable to all battery technologies to perform charging curves and charging detection.
- Simultaneously diagnoses battery condition during the 10-stage charging process to ensure effective battery activation and recovery of failed batteries.



- 1.Charging process with over-voltage over-current protection and alarm when power supply drop, short circuit protection, reverse polarity protection, high temperature alarm, auto repair battery, etc
- 2.Automatically detect whether you need battery charging, at the same time have a certain ability to repair the fault battery automatically
- 3.A variety of programming model, to meet the needs of different vehicles.



New Generation Multipurpose Programming Trolley (optional)

Features

- ※ The new generation multipurpose programming trolley is made of high-quality material by advanced technology.
- ※ Multiple layers design, simple but artistic. Unlike traditional trolley's single purpose, it combines storage function of laptop, decoder, programming power supply, accessories and battery all into one multipurpose trolley.
- ※ Simple and reasonable space design makes the work more convenient and efficient, preferred by many workshops.

Model	Overall dimension	Weight
FY-10012L	62x66x171cm	45kg
FY-10012	59x65x125cm	38kg
FY-10012A	59x65x125cm (without trolley)	35kg
FY9110A	53.6x52x123.5cm	27kg
FY-9012	55x65x120cm	25kg
FY-8012	52.6x58.2x105.6cm	19.25kg
FY-7012	50x52x86cm	15kg



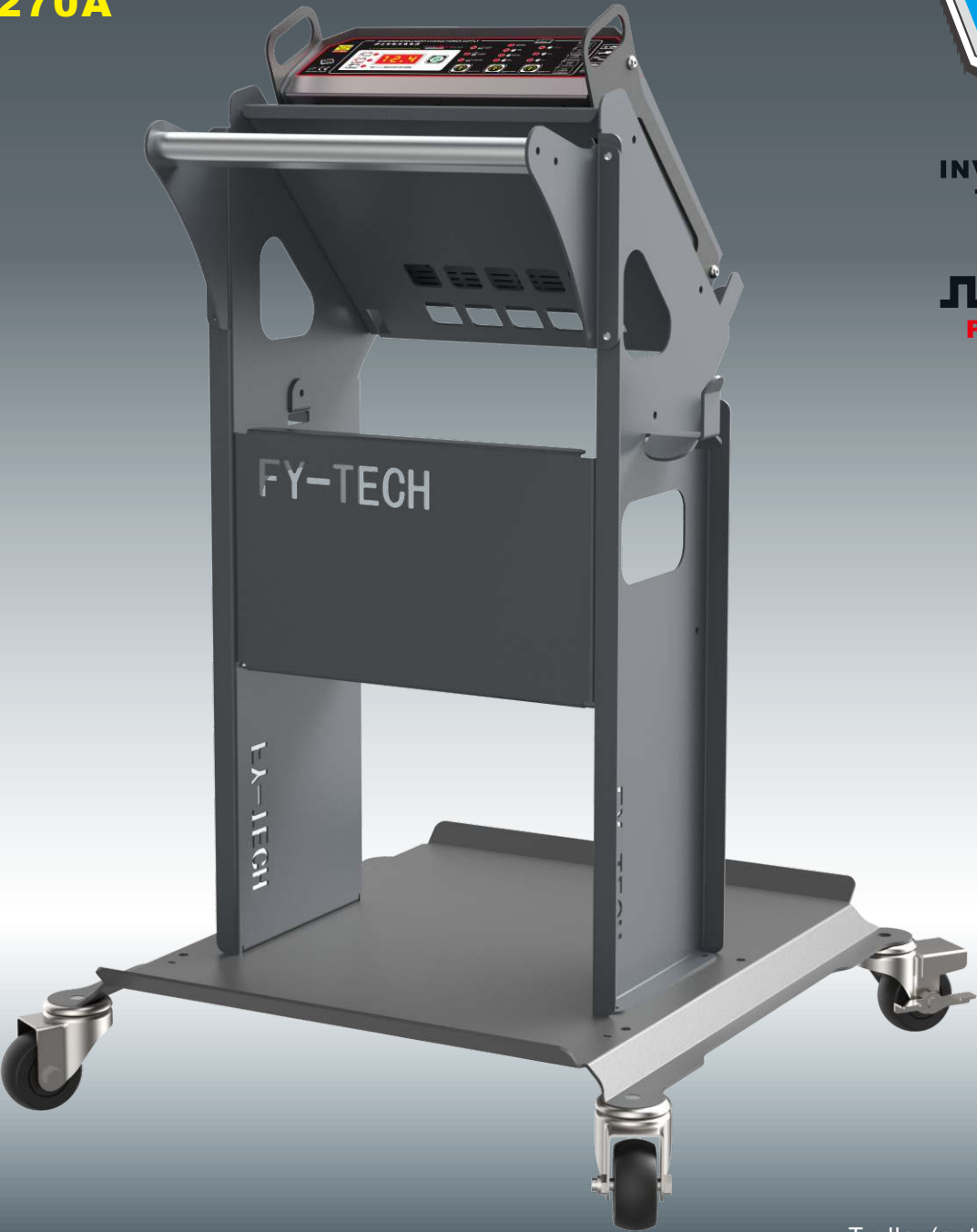
FY-10012A (without trolley)



Inverter intelligent battery charger power supply

RAL 7040 RAL 7016 RAL 3000 RAL 6017

FY-1270A



Trolley(optional)



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RAL 1023 RAL 7040 RAL 7045 RAL 5009 RAL 6017
RAL 3000 RAL 7012 FY9513 FY9512 RAL 7021



Features

- Inverter energy efficient battery charger is a new kind of advanced battery charger which comes with digital display and can automatically detect, charge and maintain batteries.
- Power down alarm, short circuit protection, reverse polarity protection, high temperature alarm and auto repair battery during charging process.
- With detection, charging and repairing modes for various batteries, including AGM, GEL, WET, EFB and advanced charging devices in automobile repair stations, 4S workshops and maintenance wrokshops.
- With reverse connection reminder and no touch spark, the charger is applicable to all battery technologies to perform charging curves and charging detection.
- Ten-stage intelligent charging: Pulse activation, test, desulphation , constant current, absorption, repair, analysis, maintenance, pulse complementary, stop charging.

Technical data

Model	50/60Hz	Input power	I _{RMS}	V	Ah	L	cm	kg
FY-1270A	AC220V ± 15%	850W	70A	12V	10~1000Ah	L-3m 6mm ²	Main machine 35x32x12	5.1kg
FY-1250A	AC220V ± 15%	600W	50A	12V	10~600Ah	L-3m 6mm ²	Main machine 35x32x12	4.9kg
FY-1230A	AC220V ± 15%	400W	30A	12V	10~400Ah	L-3m 6mm ²	Main machine 35x32x12	4.7kg



FY-201735A
Battery Charger for the Showroom

Inverter

Intelligent Battery charger power supply

The Intelligent Vehicle Battery Charger & Power Supply is an inverter battery charger for use in automotive batteries. The specially developed program protects the car starter battery by avoiding charge/discharge cycles. With 35A of output power, it ensures a reliable power supply during car demonstration in the showroom. The user-friendly interface and compact design make operation simple and easy.

Features

- It is an Intelligent Inverter type programming battery backup unit with orange backlit digital LCD display, featured as automatic detection, automatic repair, output stabilisation, energy-saving and environmentally friendly.
- Over-voltage and over-current protection, short-circuit protection, short-circuit protection and reverse polarity protection during charging.
- The function of automatic battery repair can be performed on different types of batteries to detect and repair battery during charging, suitable for car repair stations, 4S shops, repair workshops and showrooms.
- Used for vehicle maintenance in static state, avoiding low battery power damage to vehicle control components and data loss.
- Non-sparking, reverse polarity protected, applicable for the dedicated charging curves for all battery technologies.
- Compact size, light weight, easy to handle, portable and easy to use.
- Designed to effectively reduce charger noise.
- Ten-stage intelligent charging: Pulse activation, test, desulphation, constant current, absorption, repair, analysis, maintenance, pulse complementary, stop charging.
- The unique plug design allows the vehicle battery to be charged through a tiny gap in the vehicle.
- Easy to use with plug-in charging.
- Energy efficient - up to 96% energy saving.
- Anti-breakage control panel.
- For servicing the vehicle when the vehicle is stationary, replacing the battery, avoiding damage to vehicle control components and data loss caused by low battery.



Trolley(optional)



Technical parameters

Model	FY-201735A	Battery Capacity	10~1000Ah
Input Voltage	220V ± 15%	Charging Cable Length	3M
Input Power	550W	External dimension	28x26.5x10(cm)
Maximum Output Current	35A	Weight	2.5kg
Output Voltage	12~14.8V		



FY2022-30A
Automotive Battery Charger

Automotive Intelligent Battery Charger and Power Supply

The Intelligent Vehicle Battery Charger & Power Supply is an inverter battery charger for use in automotive batteries. The specially developed program protects the car starter battery by avoiding charge/discharge cycles. With 30A of output power, it ensures a reliable power supply during car demonstration in the showroom. The user-friendly interface and compact design make operation simple and easy.



Features

- Ten-stage intelligent charging: Pulse activation, test, desulphation , constant current, absorption, repair, analysis, maintenance, pulse complementary, stop charging.
- Battery repair: Pulse intelligent repair of the battery with high internal resistance which can reduce the internal resistance of the battery to some extent and thus repair part of the battery.
- Multiple protection functions: Overheat protection, short circuit protection, low voltage protection, reversed polarity protection.
- Multiple functions: Showroom, auxiliary programming and battery repair.

Technical parameters

Model	FY2022-30A	Hz	50/60
Input Voltage	220V ± 15%	Battery Capacity	10~400Ah
Input Power	360W	Charging Cable Length	2.5M
Maximum Output Current	30A	External dimension	28x30x10.5(cm)
Output Voltage	12~14.8V	Weight	3.6kg





FY20EFB

Battery Charger for the Showroom

Automotive Intelligent Battery Charger and Power Supply

The Intelligent Vehicle Battery Charger & Power Supply is an inverter battery charger for use in automotive batteries. The specially developed program protects the car starter battery by avoiding charge/discharge cycles. With 20A of output power, it ensures a reliable power supply during car demonstration in the showroom. The user-friendly interface and compact design make operation simple and easy.

Features

- Ten-stage intelligent charging: Pulse activation, test, desulphation, constant current, absorption, repair, analysis, maintenance, pulse complementary, stop charging.
- Battery repair: Pulse intelligent repair of the battery with high internal resistance which can reduce the internal resistance of the battery to some extent and thus repair part of the battery.
- Multiple protection functions: Overheat protection, short circuit protection, low voltage protection, reversed polarity protection.
- Multiple functions: Showroom, auxiliary programming and battery repair.
- The charger housing is made of ABS flame retardant plastic material to isolate the fire from the root cause.
- Simultaneously diagnoses battery condition during the 10-stage charging process to ensure effective battery activation and recovery of failed batteries.



pegboard(optional)



Technical parameters

Model	FY20EFB	Hz	50/60
Input Voltage	220V ± 15%	Battery Capacity	10~400Ah
Input Power	300W	Charging Cable Length	2.5M
Maximum Output Current	20A	Charger size	22x25x8(cm)
Output Voltage	12~14.8V	Charger weight	1.85kg
pegboard size	330x28x500mm	pegboard weight	2.2kg

Multi-purpose Battery Charger With Engine Starter

FY70-1000

AGM GEL WET EFB



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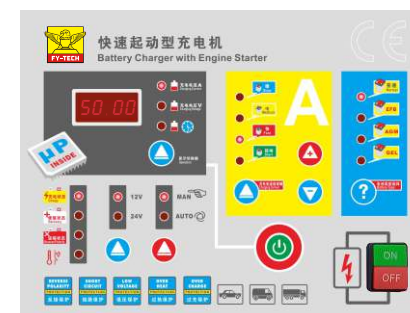
NEW



RAL 7040 RAL 7016 RAL 3000 RAL 6017

Features

- ※ With advanced technology, easy operation and user friendly design, all you have to do is to choose proper batteries, including AGM, GEL, WET and EFB.
- ※ There are manual and automatic modes available when charging. Charging current is adjustable in manual mode.
- ※ With the most practical and reliable advanced technology and production process, one-button start function, it is smart, convenient, safe and reliable.
- ※ Multi-bridge rectifier.
- ※ With HUA curved silicon steel sheet and energy efficient main transformer.
- ※ With DELIXI, OMRON and PANASONIC high quality relays.
- ※ High power transformer can start the engine rapidly and smoothly.
- ※ Control panel displays include charge rate ammeter & voltmeter.
- ※ Voltage and current output auto detect function to provide a stable charge.
- ※ Equipped with voltmeter & ammeter.
- ※ Protected against short circuiting and overloads.
- ※ Able to charge more than one battery at a time.
- ※ Jump-starting, fast or slow charging for 12V-24V batteries.
- ※ Advanced new power supply and charger with automatic diagnostic, automatic charging and automatic maintenance.
- ※ Providing the battery short-circuit protection, reverse polarity protection, high temperature alarm and automatic battery recovery during charging process.



- ※ Digital display screen with features of charging, maintenance and starting. Charging and starting different types of batteries are available.
- ※ It has an independent extended start button.
- ※ Cars can be started by remote control button, with 5 seconds timing function for quick start.
- ※ Thanks to the high-power insurance, it can adapt to bad weather, even the extremely cold weather.



- ※ Independent 12V and 24V terminals ensure a safe and reliable connection



- ※ Separate cable storage box is for putting multiple cables in order, convenient carriage and storage.



- ※ Large positive and negative pole clamp

Technical data

Model	50/60Hz	Input power	I _{RMS}	V	Ah	700A	L-3m 16mm²	cm	kg
FY70-1000	220V ± 15%	2200W	10-50A	12-24V	10~1000Ah	700A	L-3m 16mm²	Main machine 38.5x24x85cm	65kg





BATTERY CHARGER AND ENGINE STARTER SERIES

Getting Ready to Charge

Before we get into how to charge a car battery, you need to know how to prepare to charge the battery. It is very easy to get a good shock if the battery does have some juice. Before you even get started, if you have to remove the battery from the vehicle to charge it, be sure you have the tools for the job. Some batteries are easily accessible; however, some are under or in the fender and some may even be in the trunk or under the seat depending on the make and model of your vehicle.

How to Jump a Car Battery

Be sure all accessories are off and the lights, including the interior light, are off. If you have anything on, it could cause the battery to arc while you are working with it.

Once you get down to the battery, remove the negative or ground cable first. This is always the black cable unless someone replaced the cables with the wrong colors. If you look on the top of the battery, you can see which is which – the ground cable will have a negative (-) sign and the power or positive cable will have a plus (+) sign.

Clean the battery terminals with a terminal cleaning brush and a mixture of baking soda and water to neutralize the battery acid. If the battery terminals and posts have a lot of acid buildup, wear eye protection and a mask so the airborne corrosion does not contact your eyes, nose and mouth. Don't touch your face until after you've washed your hands.

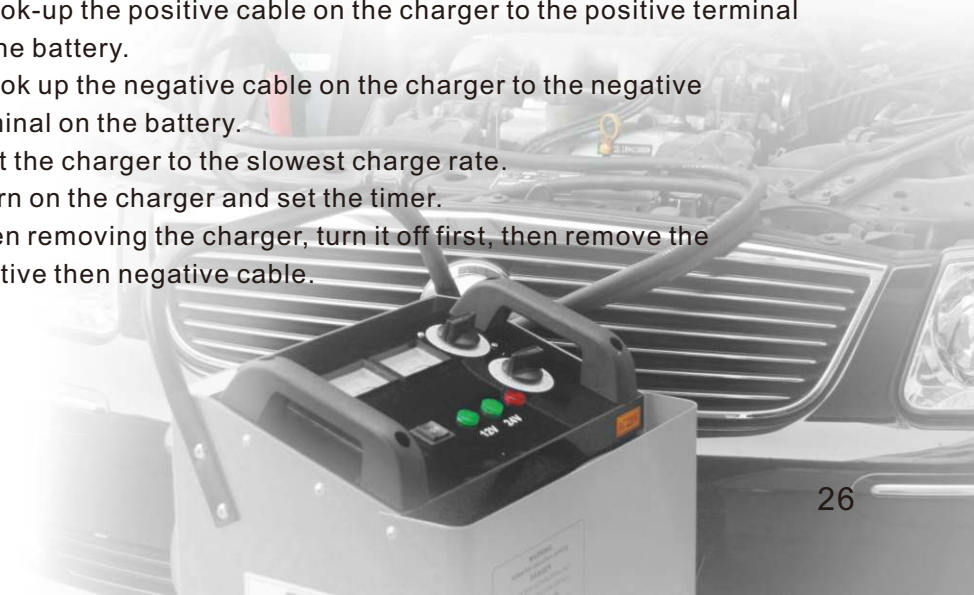
If the battery has removable caps, carefully pry the caps off and check the level of the water. If any of the cells looks low, add distilled water only; and take care to not overfill the battery. Most batteries today are “maintenance-free” so you won't be able to open them to check the acid level.

Hooking up the Battery Charger

Follow the instructions for your particular charger. Basic instructions for most chargers include:

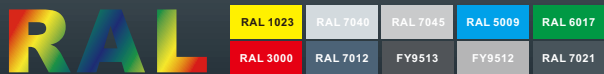
- Make sure the charger is off.
- Hook-up the positive cable on the charger to the positive terminal on the battery.
- Hook up the negative cable on the charger to the negative terminal on the battery.
- Set the charger to the slowest charge rate.
- Turn on the charger and set the timer.

When removing the charger, turn it off first, then remove the positive then negative cable.



Multifunctional battery charger with engine starter

FY-3600
FY-3000
For heavy vehicles



Features

- ※Advanced technology and easy operation. User friendly design, all you have to do is select the desirable voltage and current to obtain the ideal charging conditions.
- ※High precision timer.
- ※Practical, reliable and advanced technology.
- ※Multi-bridge rectifier.
- ※With HUA curved silicon steel sheet and energy efficient main transformer.
- ※With DELIXI, OMRON and PANASONIC high quality relays.
- ※High power transformer can start the engine rapidly and smoothly.
- ※Control panel displays include charge rate ammeter & voltmeter.
- ※Voltage and current output auto detect function to provide a stable charge.
- ※Equipped with voltmeter & ammeter.
- ※Protected against short circuiting and overloads.
- ※Able to charge more than one battery at a time.
- ※Jump-starting, fast or slow charging for 12V-24V batteries.

Description

FY series chargers are suitable for charging lead-acid and GEL batteries, but not applicable to AGM,EFB and EFR batteries. Quick and slow charge are available. The charging voltage and current can be displayed in real time. With the function of auxiliary starting engine.Charging 12V/24V batteries is available.



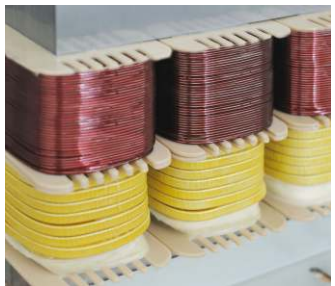
- ※Control panel displays include charge rate ammeter & voltmeter.
- ※Voltage and current output auto detect function to provide a stable charge.
- ※Equipped with voltmeter & ammeter.

Technical Data	FY-3600	FY-3000
$\pm 10\%$	380V 50/60Hz 3-ph	380V 50/60Hz 3-ph
KVA	25KVA	25KVA
	10.20.30.40.50.60.70.80.90.100A	10.20.30.40.50.60.70.80.90.95A
Reg	10	10
12V/24V	12V/24V	12V/24V
Ah	30-1350Ah	30-1200Ah
	780A	720A
	L: 3m	L: 3m
	L: 3m	L: 3m
cm	47x38x86.5cm	47x38x86.5cm
kg	65kg	62kg

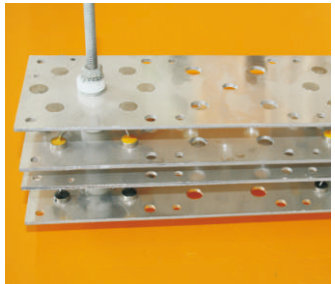
Accessories		
NO.S014 Positive and negative output cables	NO.S015 Terminal screws	NO.S008 Flat bottom wheel



Independent 12V and 24V terminals ensure a safe and reliable connection



High power transformer specifically designed for jump-starting heavy vehicles

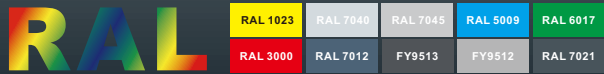


Multi-bridge rectifier with overload protection function

Multifunctional battery charger
with engine starter



FY-2000
FY-1600
FY-1400



Features

- ※Advanced technology and easy operation. User friendly design, all you have to do is select the desirable voltage and current to obtain the ideal charging conditions.
- ※High precision timer.
- ※Practical, reliable and advanced technology.
- ※Multi-bridge rectifier.
- ※With HUA curved silicon steel sheet and energy efficient main transformer.
- ※With DELIXI, OMRON and PANASONIC high-quality relays.
- ※High power transformer can start the engine rapidly and smoothly.
- ※Control panel displays include charge rate ammeter & voltmeter.
- ※Voltage and current output auto detect function to provide a stable charge.
- ※Equipped with voltmeter & ammeter.
- ※Protected against short circuiting and overloads.
- ※Able to charge more than one battery at a time.
- ※Jump-starting, fast or slow charging for 12V-24V batteries.

Description

FY series chargers are suitable for charging lead-acid and GEL batteries, but not applicable to AGM,EFB and EFR batteries. Quick and slow charge are available. The charging voltage and current can be displayed in real time. With the function of auxiliary starting engine.Charging 12V/24V batteries is available.



- ※Control panel displays include charge rate ammeter & voltmeter.
- ※Voltage and current output auto detect function to provide a stable charge.
- ※Equipped with voltmeter & ammeter.

Technical Data	FY-2000	FY-1600	FY-1400
±10%	220V or 380V 50/60Hz 1-ph	220V or 380V 50/60Hz 1-ph	220V or 380V 50/60Hz 1-ph
KVA	20KVA	16KVA	11KVA
A	20.25.35.45.55.72A	15.20.30.38.45.60A	11.17.24.31.38.50A
Reg	6	6	6
12V/24V	12V/24V	12V/24V	12V/24V
Ah	35-1000Ah	35-800Ah	35-600Ah
A	680A	560A	430A
L: 3m	L: 3m	L: 3m	L: 3m
L: 3m	L: 3m	L: 3m	L: 3m
cm	41x35x80cm	41x35x80cm	41x35x80cm
kg	56kg	51kg	45kg

Accessories		
NO.S016 Positive and negative output cables	NO.S015 Terminal screws	NO.S008 Flat bottom wheel

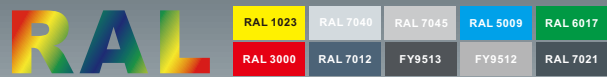


Large positive and negative pole clamp



Independent 12V and 24V terminals ensure a safe and reliable connection

Multifunctional battery charger



FY-1000
FY-850
FY-650



Features

- ※Advanced technology and easy operation. User friendly design, all you have to do is select the desirable voltage and current to obtain the ideal charging conditions.
- ※High precision timer.
- ※Practical, reliable and advanced technology.
- ※Multi-bridge rectifier.
- ※With HUA curved silicon steel sheet and energy efficient main transformer.
- ※With DELIXI, OMRON and PANASONIC high-quality relays.
- ※High power transformer can start the engine rapidly and smoothly.
- ※Control panel displays include charge rate ammeter & voltmeter.
- ※Voltage and current output auto detect function to provide a stable charge.
- ※Equipped with voltmeter & ammeter.
- ※Protected against short circuiting and overloads.
- ※Able to charge more than one battery at a time.
- ※Fast or slow charging for 12V-24V batteries.

Description

FY series chargers are suitable for charging lead-acid and GEL batteries, but not applicable to AGM,EFB and EFR batteries. Quick and slow charge are available. The charging voltage and current can be displayed in real time. Charging 12V/24V batteries is available.



Large positive and negative pole clamp

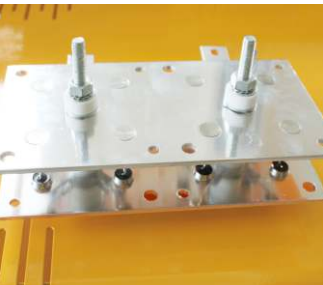


- ※Equipped with voltmeter & ammeter.
- ※Fast or slow charging function.
- ※Time setting function.
- ※FY-1000 panel is as the previous page.

Technical Data	FY-1000	FY-850	FY-650
±10%	220V 50/60Hz 1-ph	220V 50/60Hz 1-ph	220V 50/60Hz 1-ph
KVA	11KVA	8.6KVA	8.2KVA
	8.15.20.26.33.42A	7.11.16.24.31.39A	6.9.13.20.30.37A
Reg	6	6	6
12V/24V	12V/24V	12V/24V	12V/24V
Ah	35-500Ah	35-400Ah	35-300Ah
	420A	380A	350A
L: 3m	L: 3m	L: 3m	L: 3m
L: 3m	L: 3m	L: 3m	L: 3m
cm	41x35x80cm	34x26x62cm	34x26x62cm
kg	36kg	18.5kg	17.5kg



Independent 12V and 24V terminals ensure a safe and reliable connection (FY-1000 panel is the same as on the previous page)



Double-bridge rectifier

Accessories		
		
NO.S016 Positive and negative output cables	NO.S015 Terminal screws	NO.S008 Flat bottom wheel



Car battery tester

FY909GX

普通铅酸电池
平板式AGM电池
卷绕式AGM电池
EFB启停电池

Lead-Acid Multi Battery Analyzer
and Electrical System Tester

Print test result
Battery testing
Charging system testing
Starting system testing
Maximum load testing

Applications

- ※ Test 12V/24V lead-acid rechargeable batteries including wet cell (WET), maintenance-free (MF), AGM, EFB start-stop, GEL, marine...etc. Test car starting system, power generation and charging system. Applicable to CCA, DIN, IEC, EN, JIS standard batteries and unknown specification batteries.
- ※ Input voltage: DC 9-30V.
- ※ Cable specification: Eco-friendly silicone insulation material, ultra-fine copper wire and ultra-soft anti-breakage cable with the cable length 1000mm.
- ※ Product size: 110 (W)×257 (L)×52.5 (H)mm.
- ※ Product weight: 1.0kg.



Features

- ※ Testing batteries with the conductivity principle allows for multiple continuous tests without high current discharge and without heating up and damaging the batteries.
- ※ Applicable to wet cell (WET), maintenance-free (MF), AGM, EFB start-stop, GEL, marine and other lead-acid batteries.
- ※ Features battery testing, starting system testing, power generation and charging system testing.
- ※ Instantly measure the battery's Voltage (V), State of Charge (SOC), Maximum Cold Cranking Amps (CCA), Internal Resistance (IR) and State of Health (SOH).
- ※ Various test standards are built-in, allowing you to easily measure the battery with different standards.



Car battery tester

FY505GX

普通铅酸电池
平板式AGM电池
卷绕式AGM电池
EFB启停电池

Lead-Acid Multi Battery Analyzer
and Electrical System Tester

Applications

- ※ Test 12V/24V lead-acid rechargeable batteries including wet cell (WET), maintenance-free (MF), AGM, EFB start-stop, GEL, marine...etc. Test car starting system, power generation and charging system. Applicable to CCA, DIN, IEC, EN, JIS standard batteries and unknown specification batteries.
- ※ Input voltage: DC 9-30V.
- ※ Cable specification: Eco-friendly silicone insulation material, 427 pcs of ultra-fine copper wires per cable with the cable length 600mm.
- ※ Product size: 95 (W)×180 (L)×40 (H)mm.
- ※ Product weight: 0.7kg.



Features

- ※ Adopt the principle of conductivity test, no need for high current discharge, no heat and no damage to the battery, can be tested continuously for many times
- ※ Applicable to ordinary liquid-rich type (WET), maintenance-free (MF), AGM, EFB start-stop, GEL, marine and other lead-acid batteries
- ※ Three major functions: battery test, start system test, power generation and charging system test
- ※ Instantly measure the battery's: voltage (V), power (SOC), maximum cold start current (CCA), internal resistance (IR), life (SOH)
- ※ Built-in multiple test standards, you can easily measure different standards of battery



Car battery tester

FY6006A

Product parameter

Output current	DC-6A(Max)
Output voltage	DC13.8-14.7V
Dimension	140x70x50mm
Net weight	0.4kg
Input voltage	AC100-240V 50/60HZ
Scope of application	12V 2AH-100AH Lead-acid batteries

Do not charge lithium batteries.



Features

- ※Applicable to wet cell (WET), maintenance-free (MF), AGM, GEL and other lead-acid batteries.
- ※Vehicle mode, AGM/GEL mode, Motorcycle mode, Repair mode, Error mode.
- ※Recover lost battery capacity and restore batteries to original performance.



Intelligent pulse repair charger

FY6010A

Product parameter

Input voltage	AC110-220V 50/60HZ
Output voltage	12V-15.5V/ 24V-31V
Output current	DC12V10A/ 24V5A(Max)
Application scope	12V 50Ah-200Ah 24V 25Ah-150Ah
Size	158x95x62mm
Net weight	0.56kg



Features

- ※9 Charging stages gently and accurately charge the battery, battery desulfation, soft start charging, bulk charging, absorption charging, trickle charge, battery test, reconditioning, float & maintenance charging, small current to maintain charging.
- ※Applicable to wet cell (WET), maintenance-free (MF), AGM, GEL and other lead-acid batteries.
- ※Recover lost battery capacity and restore batteries to original performance.

Charging / starting cable

with insulated charging clamp




		Ø mm ²
200A	3m	10mm ²
320A	3m	16mm ²
500A	3.5m	25mm ²
700A	3.5m	35mm ²

with insulated charging clamp




		Ø mm ²
200A	3m	10mm ²
320A	3m	16mm ²
500A	3.5m	25mm ²
700A	3.5m	35mm ²

copper clamp without insulation




		Ø mm ²
200A	3m	10mm ²
320A	3m	16mm ²
500A	3.5m	25mm ²
700A	3.5m	35mm ²

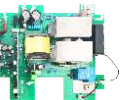
Charge Power Supply Accessories

Charging clamp				Charging cable				
NO.S020	NO.S021	NO.S022	NO.S023		Parameters	Number	Model	
					16mm ² : L3m	NO.S024	150LFP	
					NO.S024-2	150A-12H		
					NO.S024-3	100A-12H		
					NO.S024-4	70A-12H		
10mm ² : L3m	NO.S024-5	1270A						
				6mm ² : L3m	NO.S024-6	1250A		
				NO.S024-7	1230A			
				NO.S024-8	201735A			
				NO.S024-9	2022-30A			
2.5mm ² : L2.5m	NO.S024-10	20EFB						

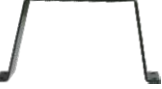
Power adapter NO.S025	Power switch NO.S026	Fan NO.S027	Caster NO.S028	Wheel NO.S029	Caster NO.S030	Wheel NO.S031	Caster NO.S032	Wheel NO.S033
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Charge Power Supply Accessories

Display board					Control board		
NO.S034	NO.S035	NO.S036	NO.S037	NO.S038	NO.S039	NO.S040	NO.S041
							

Power board					
NO.S042	NO.S043	NO.S044	NO.S045	NO.S046	NO.S047
					

Battery Charger Accessories

A/C contactor	Handle	Front footstand	Rectifier	Rectifier
NO.S001	NO.S002	NO.S003	NO.S004a	NO.S004b
				

Adjustment switch	Timer	Power switch	Wheel	Voltmeter
NO.S005	NO.S006	NO.S007	NO.S008	NO.S009
				

Ammeter	Positive and negative clamps	Battery charging cable	Over-load protection switch
NO.S010	NO.S011	NO.S012	NO.S013
			

FY-3600 FY-3000  Positive and negative output cables	FY-50A FY-30A  NO.S017 Positive and negative output cables	FY-2000 FY-1400 FY-850 FY-1600 FY-1000 FY-650  NO.S016 Positive and negative output cables	24V+ 12V+  Start- Charge- NO.S015 Terminal screws
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