

Light Duty Charger

12V & 24V 90-265VAC CHARGERS



Approved condition for use (CE mark):
Installed into portable land based systems
Fixed installations in buildings

Antares light duty charger range with microprocessor control.

These chargers offer a wide input range allowing them to be used at full rated output on both 110V as well as 230V systems. This makes them suitable for cars, vans, electric wheelchairs, mechanical handling aids, small electric vehicles and other light duties.

The units come with a 3 LED charging- status and battery-level indication panel as well as a power indicator.

This effective charger provides the solution for charging small to medium sized batteries on or off the vehicle in a protected environment.

For applications requiring higher powers consideration should be given to the professional UPC charger range.

For applications requiring ingress protection the ruggedized charger range is also available.

KEY FEATURES

- 12V or 24V outputs
- Power outputs from 140-350W
- Input voltage range 90-265 VAC with no reduction in output current
- 3 stage charging
- Charging status indication
- Reverse polarity protection
- Short circuit protection
- Overload protection
- Steel case
- Compact size and weight
- Optional Output Connectors

Charging regime

The charger operates two modes creating four distinct phases. These charging characteristics are optimised to rapidly recharge the batteries while maximizing battery life.

Phase 1 - Bulk Charging

When the charger is initially connected to a discharged battery, current will flow up to the maximum current rating of the unit. This phase continues until the voltage reaches the float voltage.

Phase 2 - Boost Charging

The Antares system continues to allow the voltage to rise thereby allowing the battery to accept charge at maximum current until the battery terminal voltage is just below the 'gassing' point. At this point the voltage is reduced to float voltage. This corresponds to about 80% restored capacity.

Phase 3 Taper Charging

During this phase the recharging current gradually declines to the float current restoring the battery to 100% capacity.

Phase 4 Float Charging

This is the reduced voltage phase which only provides enough current to overcome natural discharge and support any small connected loads.



FM 37786
ISO 9001:2008

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ANTARES
engineering with answers

Light Duty Charger

12V & 24V WIDE INPUT VOLTAGE CHARGERS

Status Display

Charging indication is by means of 3 LEDs which shows which charging phase is active. The diagram opposite shows voltage and current at each phase.

Use as a power supply

These battery chargers can also be used as a power source. Additional appliances can be connected without disrupting automatic charging.

Output leads

The unit comes complete with a charging lead, terminated at one end with clips for battery connection. We can offer alternative connectors if required, please ask.

Protection

The unit offers comprehensive protection: overload, short circuit, and reverse polarity. Battery sensing prevents the charger from outputting to a short circuit.

Enclosure

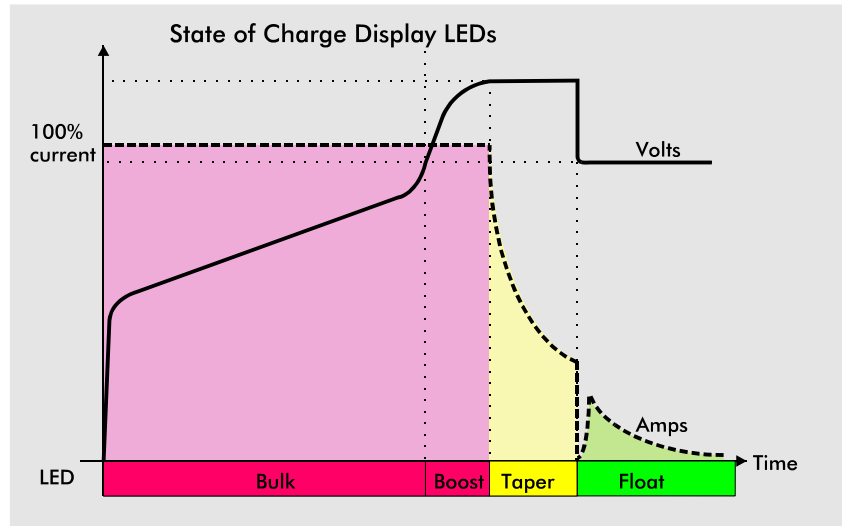
The units are supplied in a black perforated metal enclosure and are designed to IP20 suitable for in-cab environments. An aluminum mounting plate with flanges enables mounting on the vehicle.

Warranty

The units come with a fully comprehensive one year return to base warranty. The units require no maintenance allowing the user to fit and forget!

CE Marking

All units are CE marked denoting compliance to European directives on RF interference, Electromagnetic Compatibility and Safety.



LED	Colour	Description
LED1	RED	POWER ON
LED2	RED	BULK/BOOST CHARGING <80%
LED3	YELLOW	TAPER CHARGING >80%
LED4	GREEN	FLOAT CHARGING >100%



Higher powers

In applications where you need higher powers from 400W through to 3.2kW, or you have a custom application, you should consider the Antares' Universal Power Charger ranges which give currents up to 200A.

Engineering support

If you need help in deciding which equipment will be suitable for your application please feel free to call one of our engineers.

SPECIFICATIONS			
Part number	70427	70476	70477
Mode	Boost/Float		
Input Voltage	90-265VAC		
Output voltage (nom)	12V		24V
Minimum Battery Size	40Ah	80Ah	42Ah
Output current	10A	20A	12.5A
Output power	140W	280W	350W
Indication type LEDs	ON/OFF, BULK, TAPER, FLOAT CHARGE		
Dimensions	210x 110x 50mm	225 x 110 x 50mm	
Protection	Reverse Polarity, Overload, Short Circuit		
Weight	1.1kg	1.4kg	1.8kg