



# **GPU Fast Chargers**

### **24V DC CHARGING SYSTEM**



GPU 1700 and GPU 2400 portable aircraft start units are supplied with an internal 2.3A emergency charger designed to recharge the unit over an extended time period.

Frequent users of the GPU 1700 and GPU 2400 aircraft start units who require expedited charge times should consider the optional GPU fast charger.

The GPU Fast Charger is designed to re-charge your GPU 1700 / GPU 2400 units quickly and safely whilst also optimising the batteries for maximum longevity.

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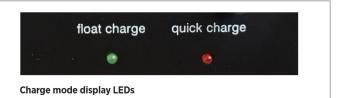
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### GPU Fast Charger connection

**For GPU 1700 and GPU 2400:** 24V Fast Charger with Merit connector





# Specifications

Input	198–264V AC/47–63Hz/single phase		
Output power	294W		
Charge timer (step 2)	4 hours ± 30 mins		
Safety timer	72 hours		
Maximum charge current	10A		
Ripple	< 100 mV p-p		
Efficiency (at 100% load)	> 83%		
Switch Frequency	67 kHz (approx.)		
Operating Temperature	-25°C to +40°C (77°F to 104°F) Storage -25°C to +85°C (77°F to 185°F)		
Protections	<ul> <li>Short circuit</li> <li>Reversed polarity</li> <li>Over-temperature</li> <li>Safety timer</li> </ul>		
Safety	EN 60335-2-29		
Insulation class	Class I		
Insulation Voltage	Primary ground 1500V AC Primary secondary 4000V AC Secondary ground 500V AC		
EMC	EN 61000-6-3 EN 61000-6-1 EN 55014		
IP rating	IP20		
Dimensions (L x W x H)	H 58mm (2.8in), L 210mm (8.3in), W 148mm (75.8in)		
Weight	1.55kg (3.4lbs)		

## Features

- 3-step charging with microprocessor control
- Low current start-up of deeply discharged batteries (step 0)
- Boost charge (step 1)
- Top-up charge (step 2)
- Pulsing float charge (step 3)Temperature compensation
- Protected against reversed
- polarity and short circuit proofUnaffected by fluctuations from
- input voltage
- 3-pin IEC-60320 input connector

### CHARGE CONTROL - LED INDICATION

•••••								
	Step 0 < 30 min	Step 0 > 30 min	Step 1	Step 2	Step 3	Float charge		
	(Yellow)	(Red=error)	(Yellow)	(Flash Yellow)	(Green)			
24V	1.3A ± 0.5A	< 0.3A	10A ± 0.5A	29.4V ± 0.1V	27.4V ± 0.2V	27.4.V ± 0.2V		
	(batt. volt < 21V)		21-29.4V	(until I charge < 1.3A or > 4hr)	(until I charge > 10A)			

#### **Charging characteristics and LED indication**

	INDICATOR: YELLOW	INDICATOR: FLASHING YELLOW	INDICATOR: GREEN
		Battery Voltage 29.4V	Battery Voltage 27.4V
	Battery Voltage 21V     Charge Current (see tech spec)		Current pulses at safe float voltage level for maximum topping of battery capacity. Pulse frequency: Microprocessor controlled. Pulse Current: (see tech spec)
	Low Current Start-Up Vbatt <21V Error Mode if <21V after 30 minutes	Cut-Off Current 7 (see tech spec)	
Step O Start Timer (0.5 hours)	<b>Step 1</b> Boost Charge	Step 2 Top Up Charge (4 hours)	Step 3 Float Charge
	Safety Timer (72 hours)		



You

AERO Specialties, 11175 W. Emerald St., Boise, ID 83713, USA Tel: +1 208 378 9888 Fax: +1 208 378 9889 sales@aerospecialties.com www.aerospecialties.com





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