

29.2V, 10A Li-ion Battery Charger



Features

- *FCC UL compliant*
- *LED indicators for charge state*
- *Over-voltage, under-voltage, short circuit, and battery reverse polarity protection*
- *Recharge function - After battery is full, it will self-discharge when idle for a long time (depend on the battery itself to discharge) and the charger will charge the battery again if the battery voltage reaches a voltage of $28.5V \pm 0.1V$.*

Applications

- *Robotics*
- *Drones*
- *E-bikes*

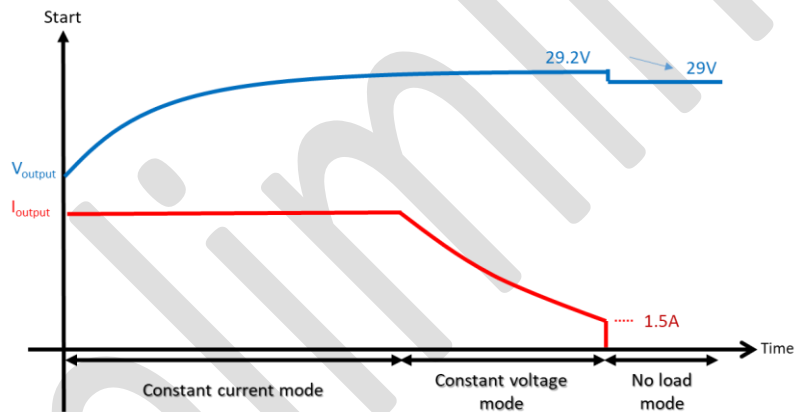
Model name		DM292U-292A-R
Input	Input Rating	90 to 264VAC
	Input Current	3.5 Arms @ 100Vac
	Frequency	50-60 Hz
	No Load Input Power	2W max. @ 230Vac
	Leakage Current	< 3.5mA @ 230Vac/50Hz
	Inrush Current	250A Max
	Power factor	≥0.95@ 230Vac, Full load
Output	DC Output Voltage	29.2V ±0.1V
	CC Mode Voltage	10A±0.4A at battery voltage 20±1V < V < 28.4V
	CV Mode Voltage	≥28.4V
	Charge Current	10A ±0.4A
	Ripple	300mVp-p @ 25°C, max load
	Fully Charged Voltage	29.2V ±0.1V
	Fully Charged Currant	1.5A ±300mA
	No Load Voltage	29V ±0.2V
	Output power	292 Watt Max
	Efficiency	Max Load Efficiency > 90%@ Vin=230V, CV:29V
Protection	Over-Voltage Protection	31.5V±1V trip point; stops charging, flashes red light. Recycle power to restart after fault is removed.
	Under Voltage Protection	When output voltage drops to less than 20V±1V; stops charging, flashes red light. Recycle power to restart after fault is removed.
	Short-Circuit Protection	Stops charging, flashes red light. Recycle power to restart after fault is removed.
	Reverse Polarity Protection	Stop charging, flashes red light. Recycle power to restart after fault is removed.
	Battery Reserve Protection	After disconnecting AC power, current flow from battery should less than 2mA.
Environmental	Temperature	Operating: -10°C to 40°C
		Non-Operating: -20°C to 85°C
	Humidity	Operating: 5% to 90% RH non-condensing
		Non-Operating: 5% to 90% RH non-condensing
Operating Altitude	Up to 2000m	
MBTF	MBTF: >100K hours @ Full load, 250C/ MIL-HDBK-217	
Safety and EMC Standards	Standards	UL 1012, CAN/CSA C22.2 No.107.2-01, IEC60335-1 / IEC60335-2-29, EN60335-1 / EN60335-2-29
	Immunity	EN 61000-4-2 (+/-4kV contact, +/-8kV air)
		EN 61000-4-5 (1kV L-L, 2kV L-PE/N-PE)
	Emissions	EN55032, FCC part 15 Class B, CISPR 32
	Harmonic Current	EN61000-3-2
	Flicker	EN61000-3-3
	Insulation Resistance	>100M Ohm minimum, 500VDC
Hi-Pot Test	Input to output:>10mA, 3000VAC for 1min, Input to Ground: <10mA, 2000VAC for 1min	

Notes:

(1): Measurements shall be made with an oscilloscope with 20MHz Bandwidth. Outputs should be bypassed at a connector with a 0.1uF ceramic capacitor and a 10uF electrolytic capacitor (Low ESR).

Model name		DM1292U-292A-R	
LED Indicator	Stop AC	LED off	
	No load mode	● Green On	
	Charging Mode	● Orange On	
	Fully Charged Mode	● Green On	
	Error Mode	Red Flash (Under Voltage Protection; Over Voltage Protection; ● Short Circuit Protection; Inside Over Temperature Protection; Reverse Battery Connection)	
Mechanical	Dimensions (L x W x H)	180mm (7.09in) x 86mm (3.39in) x 35mm (1.38in)	
	Weight	1000g (35.274oz)	
	AC Input Connector	C14 inlet	
	DC Output Cable	TBD	
	DC Output Connector	TBD	

Charging Curve: 2 stages



DM292U-292A-R Outline Drawing

