# **DU-200 Series**



### **Features :**

- Charging current configurable
- Up to 200 W LiPo/Li-Ion\* charger ٠
- 3 state charger
- High efficiency charger (up to 97%) Protections:
- - Input overvoltage up to 60 V
- Supply reverse polarity Charge overcurrent
  - Charger over temperature
- Battery over temperature Cooling by air convection (Fanless)
- Bi-color LED for charger status Bi-color LED for input supply status
- 2 years warranty

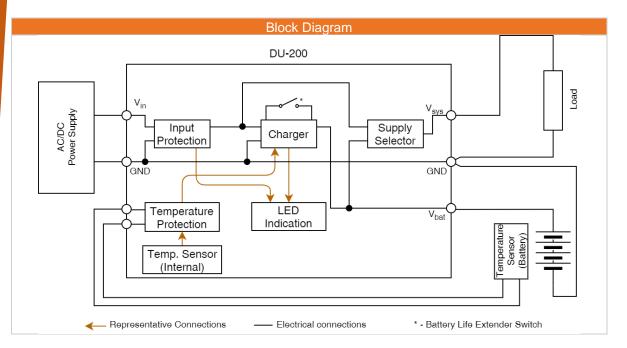
\* Other battery chemistries on demand.

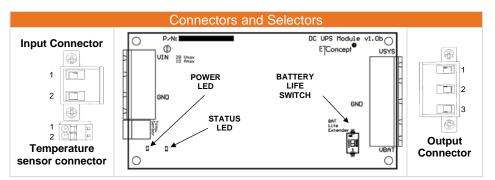
Technical Data											
		Model	DU-200-1S	DU-200-2S	DU-200-3S	DU-200-4S	DU-200-5S	DU-200-6S			
Rated Voltage			5.5 - 30 V	5.5 - 30 V 10 - 30 V 14 - 30 V 18 - 30 V				27 - 30 V			
Input	Current	(Note 1)			10 A	max.					
	Charge Voltage (Note 2)		4.2 V (4.1 V)			16.8 V (16.4 V)	21 V (20.5 V)	25.2 V (24.6 V)			
	Charge Current (Note 3)		1/2/4/8 A								
	Rated Power		34 W	68 W	101 W	135 W	168 W	202 W			
Dattam	Discharge Current		10 A max.								
Battery	Charging style		3-State (pre-charge/CC/CV)								
	Chemistry	(Note 4)	Li-Ion, Li-Polymer								
	Charge Efficiency		<95%	<96%	<97%	<97%	<97%	<97%			
	Pre-Charge Current										
	Termination Current		(Charge Current)/10								
Custom	Output	Normal	V <sub>INPUT</sub> - 0.25 V (Drop voltage of 250 mV)								
System Voltage Backup V <sub>INPO1</sub> 0.25 V (Drop voltage of 250 mV											
	Battery Dete	ction			Ye	es	· ·				
Functions	Battery Charger Status		Charging Battery / Battery Charged / Battery not Detected								
	Input Supply	Status	S	upply Good / In	put Over and U	nder Voltage /	Supply Revers	ed			
	Input Over V	oltage	30 - 55V								
	Reverse Input Supply		-40 V max.								
			PG Led (Red) - Supply Reversed								
	Charge Over Current		160% of Rated Charging Current								
			Recovers automatically after fault condition is removed								
	Over Temperature		75°C								
			Reduce charge current to 50% at 65°C and stop charging at 75°C								
Protections	Battery Over		45°℃								
	Temperature		Recovers automatically after fault condition is removed								
	Battery Shor	t Circuit			Disable	charging					
	Dattery Shor			Recovers au	itomatically afte	er fault condition	n is removed				
	Battery Over Voltage (Note 2)		4.3 V	8.6 V	12.9 V	17.2 V	21.5 V	25.7 V			
			(4.2 V)	(8.4 V)	(12.6 V)	(16.8 V)	(21.0 V)	(25.1 V)			
			Disable Charging, recovers automatically after fault condition is removed								
	Shutdown Timer 9.3 hours										
	Operating Temperature		-20 to +75°C (see derating curve)								
Environment	Operating Humidity		0 - 95% (non-condensing)								
	Storage		-40°C - 120°C and 0 - 95% (non-condensing)								
Mechanical	Dimensions		100 x 51 x 11 mm (w/o connectors) 128 x 51 x 16.5 mm								
	Weight		50 g 50 g								
<ol> <li>Input current is the sum of the system and charging currents. Charging current is automatically reduced to maintain the input current limit. Other input current limits can be ordered on demand.</li> <li>Values in backet are the charger output voltages when battery lifecycle extender switch is on.</li> <li>Charging current options for CC charge state.</li> <li>Other battery chemistries on demand.</li> </ol>				uced to							

4. Other battery chemistries on demand.



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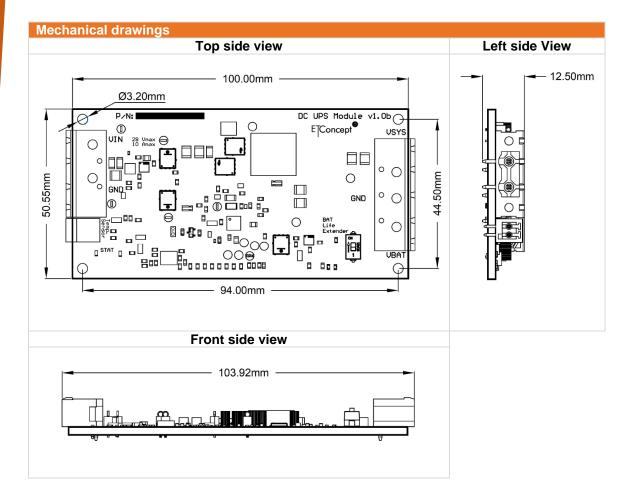


Connectors					
Terminal Number	Input Connector	Temp. Sensor. Conn.	Output		
1	DC Input Positive (V <sub>IN</sub> )	Sensor - (GND)	System Positive (V <sub>SYS</sub> )		
<u>2</u>	DC Input Negative (GND)	Sensor +	System and Battery Negative (GND)		
3	-		Battery Positive (V <sub>BAT</sub> )		

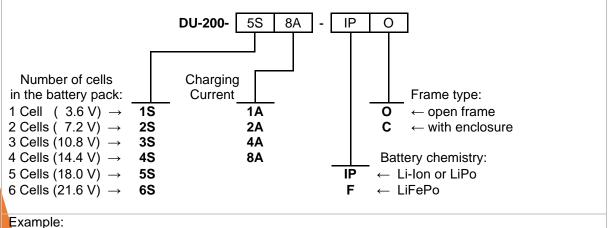
LED Indicators							
LED State	Power LED STATUS LED		Charge Current settings				
GREEN	Input supply OK				Set to 1 A		Set to 4 A
RED	Reversed polarity	Battery Charging		1 H 2 H 8 H 8 H	for CC zone	1 A 2 A 4 A 8 A	for CC zone
RED BLINKING	-	Charger Over Temperature			Set to 2 A		Set to 8 A
OFF	Input supply NOK	No Battery detected		1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	for CC zone	1 A 2 A 8 A 8 A	for CC zone

Switch State	Function
ON	Charge the battery pack to 90% of its capacity ( <i>e.g.</i> 4.1 V/cell) to increase the battery cycles. LiPo and Li-Ion cells double the cycles (up to 1000 cycles) if not fully charged.
OFF	Charge battery pack to 100% capacity ( <i>e.g.</i> 4.2 V/cell). Typically, a LiPo and Li-Ion cells can make 500 cycles.







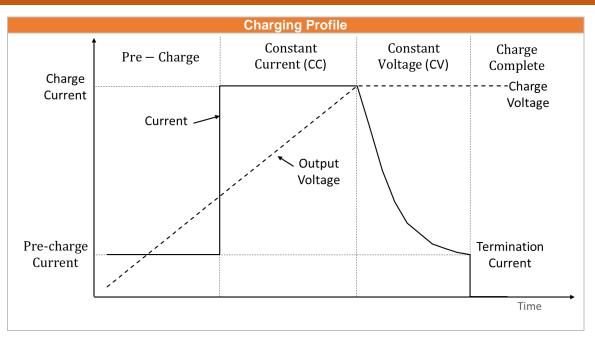


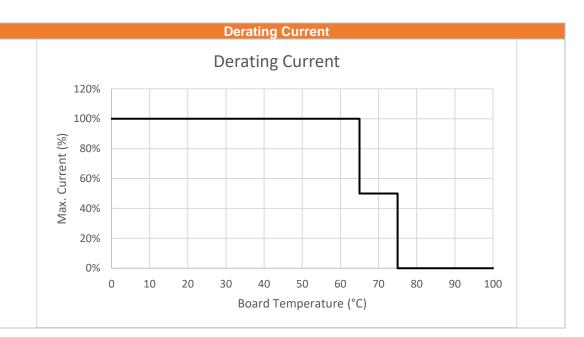
A DC-UPS module for 5 cells Li-lon battery pack with a charge current of 8 Amperes and without enclosure has the following part number:

DU-200-5S8A-IPO

**ET**Concept

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