# stored energy solutions for a demanding world



# Model: 51.2NESR100

# **NESR Series**

Narada NESR series is a complete range of 48V LiFePO<sub>4</sub>(Lithium Iron phosphate) battery products, for a wide variety of applications, such as telecom base station, UPS, renewable energy system, etc., with advanced life, standard size, light weight and strong environmental adaptability.

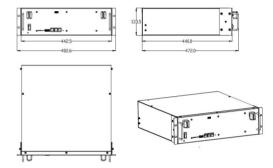


#### Battery Management System(BMS)

For standard Narada lithium battery module, BMS is applied to monitor voltage, current, temperature of cells and module, take protections against over-charge, over-discharge, over-current, over-temperature,under-temperature and short circuit, etc., and provide cell balancing and current limitation during charging process to ensure a reliable safety and excellent performance.

Meantime, Narada supply customized UI software for BMS communication via RS485 to set parameters or read monitoring data.

#### Dimensions-mm



### **Specifications**

Battery Specific	cation	16S
Rated Voltage		51.2V
Rated Voltage Rated Capacity		100Ah (0.2C to 43.2V @ 25°C)
	nt (Max.)	100A
Discharge Current (Max.)		43.2V
Discharge End Voltage		45.2V 20A
Charge Current (Recomm.)		
Charge Current (Max.)		100A
Charge Voltage		57.6±0.5V
	Width	442.5 mm
Dimensions	Depth	440 mm
	Height	133.5 mm
Typical Weight		42.0±1Kg
Layout of Front	Pannel	
Status Indicators		SOC / ALM / RUN
Communication Ports		CAN / RS485*2
Communication in Parallel		Max 16 modules in parallel
Reset Key		Available
Terminal Size		M8 (Screw size)
LCD Screen		Available
Rocker Switch		Available
Dry contact		Available
Gyro/Communica	ation Anti-theft	Optional
Operation Envir	onments	
		Discharge -20 to + 60°C
Temperature Range		Charge 0 to + 60 °C
		Storage 0 to + 40 °C
Temperature Recommendation		Discharge +15 to + 35℃
		Charge +15 to + 35 ℃
		Storage +15 to + 30°C
Humidity		5% to 95%
		0.0 00 00 00



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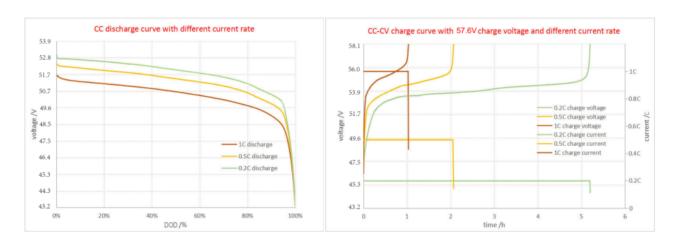
#### Constant Current Discharge Characteristics /for one module (25°C,77°F)

Current(A) End voltage Time	0.1C	0.2C	0.33C	0.5C	0.8C	1.0C
End voltage Time			Hours			
49.6V	9.73	4.85	2.93	1.90	1.15	0.90
48.0V	9.92	4.96	3.00	1.96	1.20	0.93
46.4V	10.05	5.03	3.05	2.00	1.23	0.96
44.8V	10.13	5.07	3.08	2.02	1.25	0.98
43.2V	10.18	5.10	3.09	2.03	1.26	1.00

### Discharge Data with Constant Power /for one module (25°C,77°F)

Power	500 W	1000W	1620W	2480W	3900W	4500W
End voltage Time			Hours			
49.6V	9.83	4.89	2.92	1.85	1.05	0.82
48.0V	10.02	4.99	3.01	1.91	1.11	0.86
46.4V	10.13	5.05	3.05	1.95	1.15	0.9
44.8V	10.21	5.09	3.08	1.98	1.18	0.93
43.2V	10.25	5.12	3.09	2.00	1.2	0.95

#### **Performance Curves**























#### **Disclaimers of warranties:**

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