

# Westell® | NPFC Battery Series

FGP-NPFC100-48

## General Information

Westell's NPFC Battery series by Narada offers 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. A drop-in replacement to legacy lead acid battery strings, the NPFC batteries offer ease of installation, monitoring and maintenance free operation. operation. Offered in 10AH, 20AH, 50AH, and 100AH models.\*

NPFC batteries have a much smaller footprint and much less weight (40-60% less depending on batteries) than sealed lead acid, and are compatible with all standard telecom rectifiers.

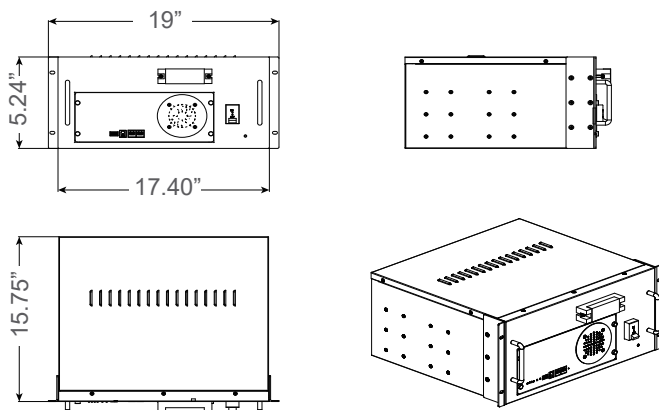
The Battery Management System (BMS) is used to monitor voltage, current, temperature of cells and module, provide protection against over-charge, over-discharge, over-current, over-temperature, undertemperature and short circuit, etc., and provide cell balancing and current limitation during charging process to ensure reliable, safe and excellent performance.

Batteries can be interconnected through the RS485 ports. Software and cable for BMS communication via RS232 to set parameters or read monitoring data is available.

## Ordering Information

Part Number	Description
FGP-NPFC10-48	10AH LiFePO <sub>4</sub> 48V NPFC Battery
FGP-NPFC20-48	20AH LiFePO <sub>4</sub> 48V NPFC Battery
FGP-NPFC50-48	50AH LiFePO <sub>4</sub> 48V NPFC Battery
FGP-NPFC100-48	100AH LiFePO <sub>4</sub> 48V NPFC Battery
FGP-NPFC-RS232	RS232 NPFC Battery Comm Kit

## Product Dimensions (in)



FGP-NPFC100-48

## Product Specifications

Battery Specifications		
Rated Voltage		48V
Rated Capacity		100Ah (0.5C to 40.5V at 25°C)
Discharge Current (Max.)		100A
Discharge End Voltage		40.5V
Charge Current (Recomm.)		20A
Charge Current (Max.)		100A
Charge Voltage		54±0.5V
Dimensions (in)	Width Depth Height	17.40~ 15.75~ 5.24" (3 RU)
Typical Weight		108 lbs
Layout of Front Panel		
Status Indicators		SOC / ALM / RUN
Communication Ports		RS232 / RS485*2
Communication in Parallel		8 modules in maximum
Reset Key		Available
Terminal Size		M6 (Screw size)
LCD Screen		Not Available
Breaker		Not Available
Dry Contact		NC
Operational Environments		
Temperature Range		Discharge -20 to +60 °C Charge 0 to +60 °C Storage 0 to +40 °C
Temperature Recommendation		Discharge +15 to +35 °C Charge +15 to +35 °C Storage +15 to +35 °C
Humidity		5% to 95%

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## Constant Current Discharge Characteristics (25°C, 77°F)

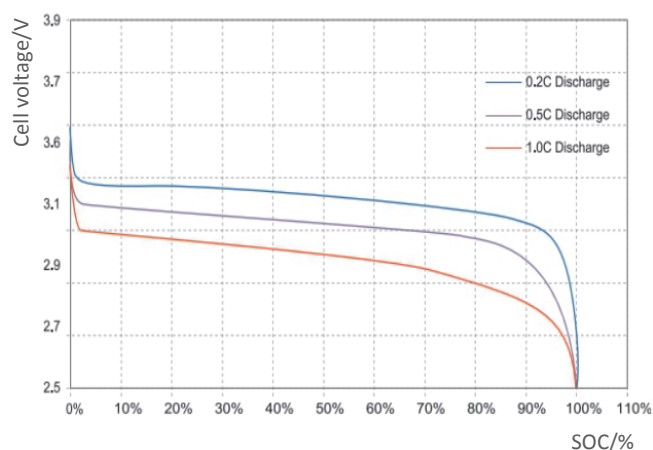
End voltage	Current(A) Time	0.1C	0.15C	0.2C	0.25C	0.3C	0.4C	0.5C	0.6C	0.8C
		Hours								
46.5V		9.56	6.35	4.75	3.78	3.12	2.29	1.79	1.45	1.02
45.0V		9.76	6.49	4.85	3.87	3.21	2.39	1.89	1.57	1.15
43.5V		9.89	6.58	4.92	3.92	3.25	2.42	1.93	1.60	1.19
42.0V		9.98	6.64	4.96	3.96	3.29	2.45	1.94	1.61	1.21
40.5V		10.04	6.68	5.00	3.99	3.31	2.46	1.96	1.63	1.22

## Discharge Data with Constant Power (25°C, 77°F)

End voltage	Power Time	450W	900W	1350W	1800W	2250W	2700W	3150W
		Hours						
46.5V		10.35	5.11	3.36	2.46	1.92	1.53	1.27
45.0V		10.55	5.22	3.45	2.55	2.02	1.66	1.40
43.5V		10.66	5.28	3.49	2.58	2.06	1.69	1.43
42.0V		10.75	5.32	3.52	2.61	2.07	1.70	1.45
40.5V		10.79	5.35	3.54	2.62	2.09	1.72	1.46

## Performance Curves

CC Discharge to 2.5V at different current rate



CC-CV Charge with 3.65V constant voltage and different current rate

