



Datasheet  
06/2025



\*illustration similar

## 8S6P HF0806PN01 Battery Pack

- 8S6P Li-Ion Battery pack
- 25.6 V nominal voltage
- 24.0 Ah nominal capacity, 614 Wh (UN38.3)
- Premium quality cell IFR26650-4000
- Plastic case

### 8S6P HF0806PN01 Battery Pack

## Specifications

Item	Descriptions	Specifications	Remark
1	Model Number	HF0806PN01	
2	Cell	IFR26650-4000	
3	Configuration	8S6P	8LNR27/66
4	Nominal Voltage	25.6 V	3.2 V * 8S
5	Nominal Capacity	24.0 Ah	4.0 Ah * 6P
6	Watt-Hour (UN38.3)	614.4 Wh	Calculation: 12.8 Wh (V * Ah) * 48 cells
7	Internal Resistance	<100 mΩ	Measure from output terminal of battery pack
8	Operation Temperature	Standard Charge Standard Discharge	0°C ... +60°C -20°C ... +60°C
9	Storage condition	< one month < three months < one year	0°C ... +35°C 0°C ... +30°C 0°C ... +25°C
10	Humidity	30 ... 80%	Percentage of recoverable capacity 80%
11	Charging Voltage (Maximum)	28.8 V	28.0 V recommended
12	Charge Current	5.0 A 12.0 A	recommended Max.
13	Discharge End Voltage	20.0 V 18.4 V	Recommended Limited by device
14	Discharge Current	30.0 A	50.0 A for 10 sec.
15	Internal Consumption	<300 μA <5 mA	Sleep mode Operation
16	Communication Interface	NA	
17	BMS Design (7S-42A)	(1) Over charge voltage threshold (2) Under voltage threshold (3) Over charge current threshold (4) Over discharge current threshold (5) Short circuit protection (6) Short circuit delay time (7) Pack internal resistance	(1) 3.80 ±0.025 V (2) 2.30 ±0.025 V (3) 15.0 ±1.0 A (4) 52.0 ±1.0 A (5) 200.0 ±1.0 A (6) typ. 550 μs (7) <100 mΩ
18	Connection type	Terminal (+) (-)	

8S6P HF0806PN01 Battery Pack

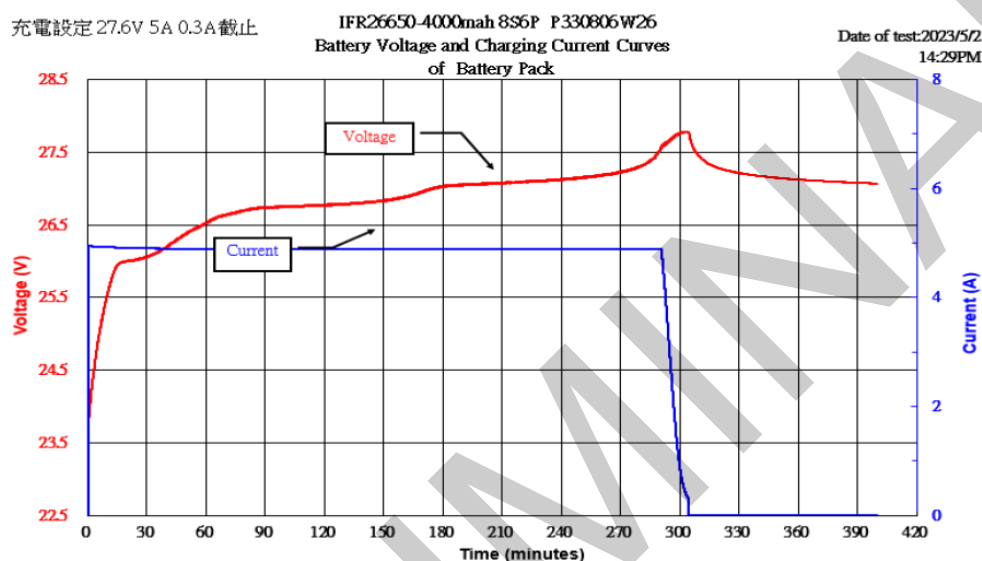
## Specifications

20	Enclosure	Plastic Hard Case	
21	Weight (g)	5.7 kg $\pm$ 0.3 kg	
22	Dimension(mm)	194 x 132 x 170 mm	$\pm$ 3.0 mm
23	IP standard	IP20	
24	Certifications	UN38.3 Rev. 7	UN Transport Test

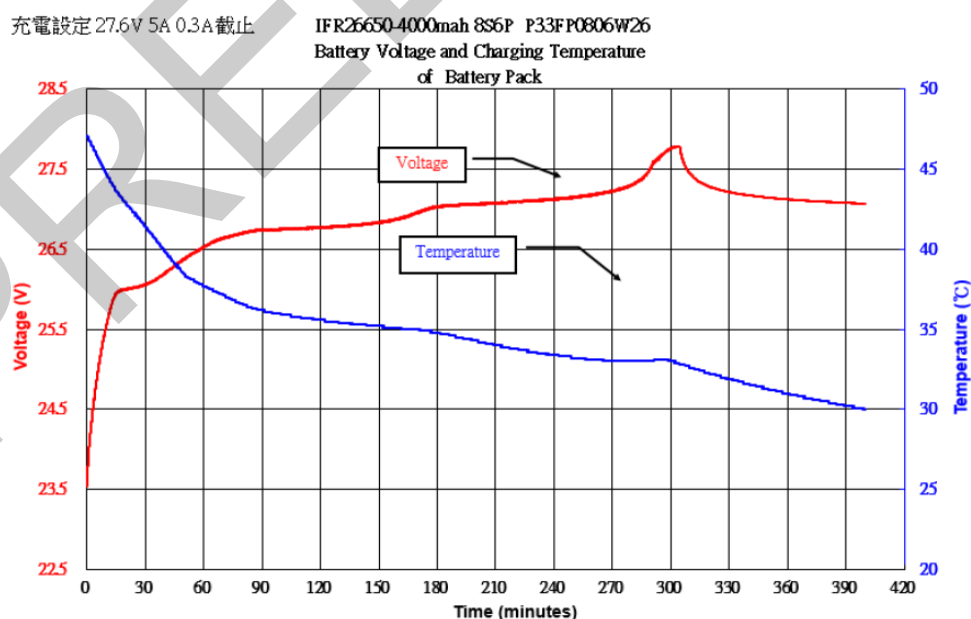
## 8S6P HF0806PN01 Battery Pack

# Charge Performance Curve

Charging condition	27.6V/5A, 0.3A end
Charging time	304.6min
Charging capacity	24.116Ah



Charging condition	27.6V/5A, 0.3A end
Charging time	304.6min
Cell temperature rise	47.1°C → 32.8°C



## 8S6P HF0806PN01 Battery Pack

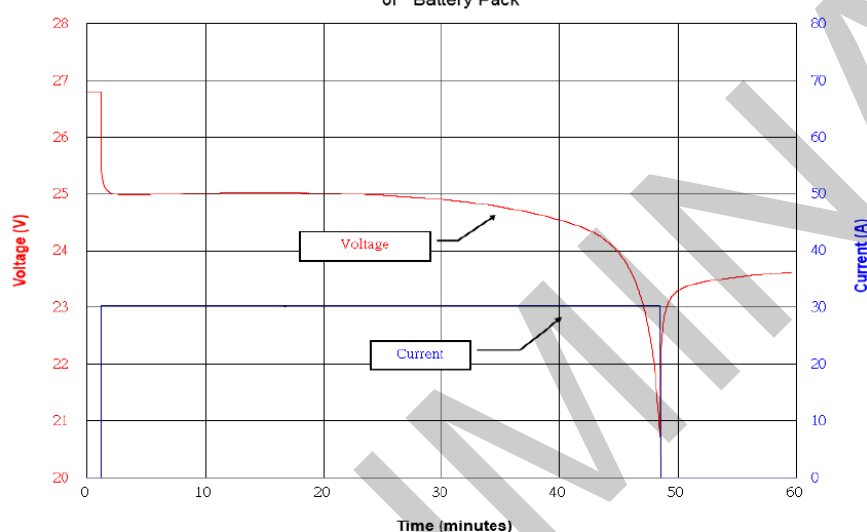
# Discharge Performance Curve

Discharging condition	30A / UVP
Discharging time	48.5min
Discharging capacity	24.25Ah

30A 放电至 BMS CUT OFF  
25°C → 49.8°C 温升 24.8°C

IFR26650-4000mah 8S6P P330806W26  
Battery Voltage and Discharge Current Curve  
of Battery Pack

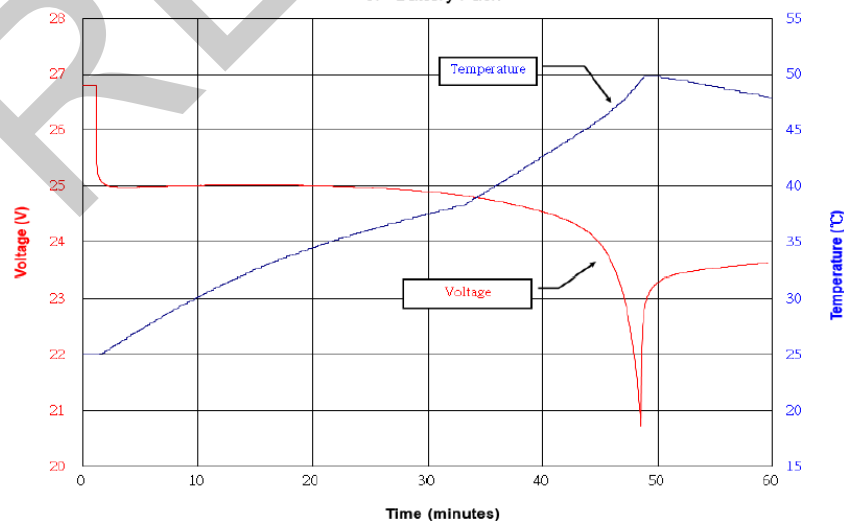
Date of test: 2023/5/2  
11:25AM



Discharging condition	30A / UVP
Discharging time	48.5min
Cell temperature rise	25°C → 49.8°C

30A 放电至 BMS CUT OFF  
25°C → 49.8°C 温升 24.8°C

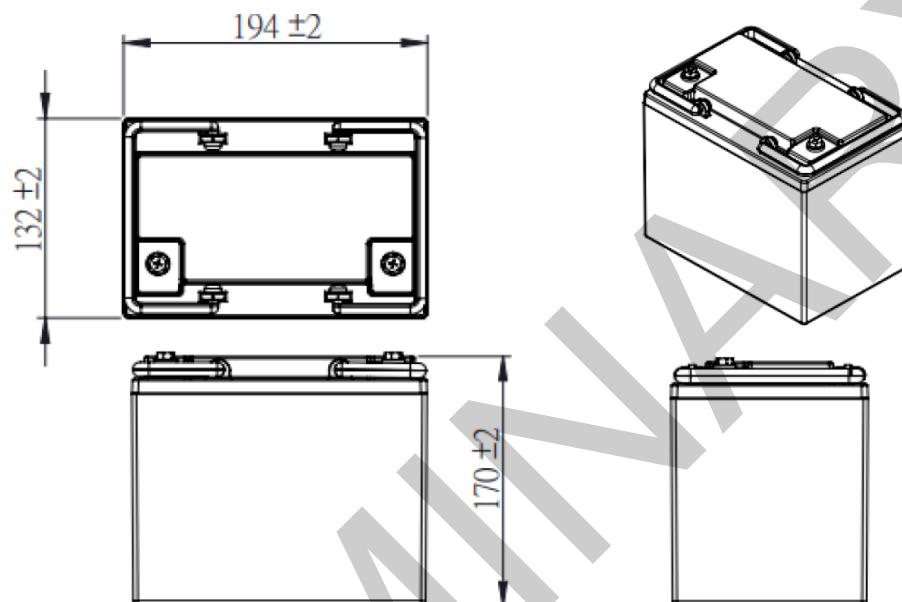
IFR26650-4000mah 8S6P P330806W26  
Battery Voltage and Discharge Temperature  
of Battery Pack



## 8S6P HF0806PN01 Battery Pack

# Mechanical

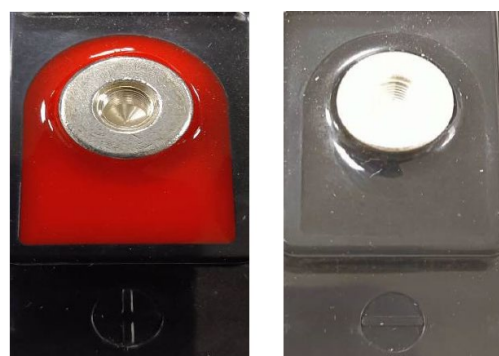
### Drawing



### Connector Definition

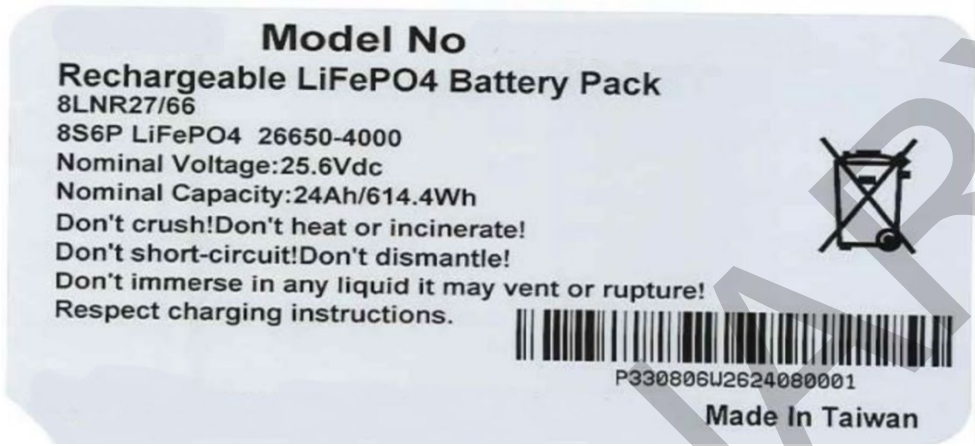
Terminal (+) (-)

Pin	Definition	Function
1	Output +	Ground
2	Output -	Charge + / Discharge -



8S6P HF0806PN01 Battery Pack

Label



(preliminary)

Size: 100 \* 50 mm

Serial Number:

Serial Number		Definition
Part Number WYYWWXXXX		Model name:
		Production year: YY
		Production week: WW
		Serial number: XXXX

8S6P HF0806PN01 Battery Pack

Photos



Packaging

tbd

Accessories

Item	Part number	Remark
Charger	TBD	On request



## 8S6P HF0806PN01 Battery Pack

# Precautions for use

- For connector definition, please refer to “Connector Definition” (page 6).
- The battery has a fixed voltage output under normal conditions and can be charged and discharged normally.
- Never disassemble or modify the battery pack.
- Do not pierce the battery pack with a nail or hit it with a hammer, step on it or subject it to strong impact in other ways.
- Do not place the battery near a fire source or high temperature.
- Do not store the battery in a humid environment or expose it to rain or water.
- When the battery pack is not used for a long time, the battery should be removed from the device or equipment. It prevents the battery pack from drawing less current from the device or device.
- The battery conducts a learning cycle according to the specification every 3 months (complete charge and discharge), check the battery pack voltage to prevent deep discharge of the battery pack.
- If the battery is no longer in use and cannot be removed from the device or equipment, immediately remove the battery pack full charge. Check the battery pack voltage status every 2 months to prevent the battery from going into deep discharge due to device or device depletion.

# Battery storage management

### New batteries shipped at 30% SOC

- When batteries are stored in a humidity and temperature-controlled environment, the battery should be recharged every 3 months.
- When batteries cannot be stored in a humidity and temperature-controlled environment, the battery should be recharged every 2 months.
- Please charge the battery with METCO approved charger for 1 hour.
- After charging, please measure the battery voltage and internal resistance. If the internal resistance of the battery is over the specification value 2-3 times, please contact HY-LINE for inspection.

### Batteries installed with the device shipped to distributors or end users

- Please charge the battery immediately after daily usage.
- Please charge the battery with an appropriate charger for 1 hour or fully charged.
- If there is a short period of time not using the battery (1-2 weeks), please use an appropriate charger to charge for 1 hour. If the battery can be removed from the device, please remove the battery and store it alone after charging for 1 hour or fully charged.

8S6P HF0806PN01 Battery Pack

## Contact

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