

Felicity Solar IVPM5048 / IVPM7548 / IVPM10048

10,000 VA / 8,000 W at 48 V off-grid solar inverter, optional built-in MPPT.

Models Covered: IVPM5048, IVPM7548, IVPM10048

Manufacturer: Shenzhen Felicity Solar Technology Co., Ltd.

Application: The Felicity Solar IVPM10048 is an off-grid inverter-charger rated at 10,000 VA / 8,000 W at 48 V, running from a 48 V bank. It produces a pure sine wave at 220 Vac and transfers between utility and battery in about 15 ms. Felicity's datasheet lists solar charging alongside utility charging for this series, with the built-in MPPT controller as an option.

Technical Specifications

Parameter	IVPM5048	IVPM7548	IVPM10048
PV String Input Data			
Max PV Input Power	6600W		
Max PV Open-Circuit Voltage	170Vdc		
Nominal DC Voltage	48V		
Electrical / AC Output Data			
Max Efficiency	90%		
Rated AC Power	4000W	6000W	8000W
Rated Apparent Power	5000 VA	7500 VA	10000 VA
Surge / Peak Power	2× rated power for 5 seconds VA		
Transfer / Switchover Time	15 ms typical, both directions		
AC Input Voltage	220Vac		
AC Output Voltage	220Vac ±5%		
Grid / AC Frequency	50Hz/60Hz		
Input Voltage Range	90~280 Vac		
Output Frequency	50±0.3Hz/60Hz±0.3Hz(Adjustable)		
Output Waveform	Pure sine wave		
AC Voltage Regulation (Battery Mode)	±5% rms		
Max AC Input Voltage	280Vrms		
Max Continuous AC Pass-Through	AC 63A		
Topology	Low-frequency (transformer-based)		
Battery Data			
Max Charge Current	50A	60A	80A
Max Solar / PV Charge Current	120A		
Supported Battery Type	AGM, Flooded or Self-defined		
Protection Features			

Parameter	IVPM5048	IVPM7548	IVPM10048
Overcharge Protection	Yes		
Overload Protection	5s @ ≥150% load; 10s @ 105%~150% load		
Mechanical Data			
Package Dimensions	607x540x290mm	607x540x290mm	670x470x355mm
Weight	36.3 kg	36.3 kg	67.7 kg
Operating Conditions			
Operating Temperature	0°C ~ 40°C		
Storage Temperature Range	-15°C ~ 60°C		

Note: Specifications are based on the official Felicity Solar IVPM5048 / IVPM7548 / IVPM10048 datasheet. Values may be subject to change; always verify against the latest manufacturer documentation before system design and procurement.

Availability & grid compliance in UAE

Market	UAE
Grid authority / regulator	DEWA, ADDC, SEWA
Quotation currency	AED
Support hours timezone	Asia/Dubai
Delivery & installation coverage	Dubai, Abu Dhabi, Sharjah, Ajman, Ras Al Khaimah

Figures on this page are the manufacturer's own, measured at the test conditions the datasheet states — they do not change by country. What changes is the approval that has to be met before the unit is energised: in UAE that is DEWA, ADDC, SEWA. Confirm the grid code, import requirements and any local certification with them, or with us, before you order.

Key Features & Technical Highlights

- **Pure sine wave:** 220 Vac output, safe for motors and electronics.
- **2x surge for 5 seconds:** Starts pumps, fridges and power tools.
- **15 ms transfer:** Switches between grid and battery fast enough for a PC.

Frequently Asked Questions

- ▶ Can the IVPM5048 charge from solar panels directly?
 - ▶ How fast can the IVPM5048 charge from the grid?
 - ▶ What battery bank does the IVPM5048 need?
 - ▶ How fast can the IVPM7548 charge from the grid?
 - ▶ How fast can the IVPM10048 charge from the grid?
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Official Source & Documentation

This technical datasheet is derived from official manufacturer documentation provided by **Shenzhen Felicity Solar Technology Co., Ltd.** For the latest specifications, firmware updates, and official documentation, visit the manufacturer's website.

- **Manufacturer Website:** www.felicitysolar.com
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Disclaimer: All specifications and technical data presented on this page are based on the official Felicity Solar IVPM5048 / IVPM7548 / IVPM10048 datasheet published by Shenzhen Felicity Solar Technology Co., Ltd. Specifications are subject to change without notice. Always verify against the latest manufacturer documentation at felicitysolar.com before system design, procurement, or installation. Compliance with local regulations, grid codes (DEWA, ADDC, SEWA) and utility requirements in UAE is the responsibility of the system designer/installer.

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