Huawei SUN2000-5/6/8/10/12K-MAP0

The Huawei SUN2000-MAP0 is a three-phase hybrid inverter delivering 5-12kW with up to 98.6% efficiency. Features full three-phase backup, 200% overload for 10 seconds, IP66 rating, and split-phase operation for demand-based power allocation.

Models Covered: SUN2000-5K-MAP0, SUN2000-6K-MAP0, SUN2000-8K-MAP0, SUN2000-10K-MAP0, SUN2000-12K-MAP0

Manufacturer: Huawei Digital Power Technologies Co., Ltd.

Application: Ideal for United Arab Emirates's climate with wide operating temperature range and dust-resistant design.

INVERTERS | MAP0 THREE-PHASE HYBRID INVERTER | 98.6% MAX EFFICIENCY | FULL THREE-PHASE BACKUP | 200% OVERLOAD (10 SEC) | IP66 RATED | AFCI ARC PROTECTION (0.5S)

Download PDF Datasheet | WhatsApp Us

Technical Specifications

- Technical Specifications
- Key Features
- Applications & Use Cases
- Frequently Asked Questions

Technical Specifications

Parameter	SUN2000-5K-MAP0	SUN2000-6K-MAP0	SUN2000-8K-MAP0	SUN2000-10K-MAP0	SUN2000-12K-MAP0
DC Input					
Recommended Max PV Power [Wp]	9000	11000	14600	18000	22000
Max DC Voltage [V]	1100				
Operating Voltage Range [V]	160-1000				
Startup Voltage [V]	160				

Max Input Current per MPPT [A]	16				
Max Short-Circuit Current [A]	22				
No. of MPPTs / Strings per MPPT	2 / 1				
AC Output					
Rated AC Power [W]	5000	6000	8000	10000	12000
Max Apparent Power [VA]	5500	6600	8800	11000	13200
Max Output Current [A]	8.3	10.0	13.3	16.7	20.2
Grid Connection	Three-Phase				
Nominal AC Voltage [V]	220/380, 230/400, 240/415				
Max Efficiency [%]	98.4	98.6	98.6	98.6	98.6
European Efficiency [%]	97.5	97.7	98.0	98.1	98.2
Battery (DC)					
Compatible Batteries	LUNA2000-5/10/15-S0, LUNA2000-7/14/21-S1				
Operating Voltage [V]	600-980				
Max Charging Power [W]	5500	6600	8800	11000	12000
Off-Grid / Backup					
Backup Device	SmartGuard-63A-T0				
Overload (Continuous)	110%				
Overload (5 min)	150%				
Overload (10 sec)	200%				

Switchover Time [ms]	≤ 20
General Data	
Dimensions (W×H×D) [mm]	490 × 460 × 130
Weight [kg]	21
Protection Degree	IP66
Operating Temperature	-25 °C ~ +60 °C
Cooling	Natural Convection
Noise [dB]	≤ 29

Note: Specifications are based on the official Huawei datasheet. Values may be subject to change; always verify against the latest manufacturer documentation.

Key Features

- 98.6% Max Efficiency
- Full Three-Phase Backup
- 200% Overload (10 sec)
- IP66 Rated
- AFCI Arc Protection (0.5s)
- Split-Phase Operation

Applications & Use Cases

Typical Applications

- Residential solar systems
- Commercial installations
- Industrial solar plants
- Utility-scale projects
- Smart grid integration

Regional Installation Notes (United Arab Emirates)

Climate Suitability: Ideal for United Arab Emirates's climate with wide operating temperature range and dust-resistant design.

- Sand and dust resistant design
- Wide operating temperature range
- High efficiency in hot conditions
- Long-term warranty

Frequently Asked Questions

▼ What makes the MAP0 different from other Huawei inverters?

The MAP0 is a dedicated three-phase hybrid inverter with full three-phase emergency backup capability, 200% overload for 10 seconds, split-phase operation, and IP66 rating. It delivers all three phases simultaneously during outages.

▶ What backup device is needed?

▶ What is the warranty coverage for the Huawei SUN2000-5/6/8/10/12K-MAP0?

▶ What certifications does the Huawei SUN2000-5/6/8/10/12K-MAP0 have?

▶ What model variants are available in the SUN2000-5/6/8/10/12K-MAP0 series?

▶ What are the installation requirements for the Huawei SUN2000-5/6/8/10/12K-MAP0?

▶ How does the Huawei SUN2000-5/6/8/10/12K-MAP0 perform in hot climates?

▶ What are the dimensions and weight of the Huawei SUN2000-5/6/8/10/12K-MAP0?

Official Source & Documentation

This technical datasheet is derived from official manufacturer documentation provided by **Huawei Digital Power Technologies Co., Ltd.**.

- **Manufacturer Website:** https://solar.huawei.com
- **Technical Support:** solar@huawei.com

- **Sales Inquiries:** sales@huawei-solar.org
- **Data Source:** Official Datasheet - Huawei Digital Power Technologies Co., Ltd.

Disclaimer: *All specifications are based on the official datasheet. Specifications are subject to change without notice. Please verify with the manufacturer for the most current information.*

Last Updated: March 2026 | **Document Version:** 1.0 | **Published by:** Huawei UAE (huawei-solar.org)