# Huawei SUN2000-12/15/17/20/25KTL-M5

**The Huawei SUN2000-M5 is a three-phase smart energy controller delivering 12-25kW with up to 98.4% efficiency. Features 2 MPPTs, 1100V input, IP66 protection, intelligent cooling, and LUNA2000 battery compatibility.**

**Models Covered:** SUN2000-12KTL-M5, SUN2000-15KTL-M5, SUN2000-17KTL-M5, SUN2000-20KTL-M5, SUN2000-25KTL-M5

**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 | M5 THREE-PHASE SMART ENERGY CONTROLLER | 98.4% MAX EFFICIENCY | DUAL MPPT (1100V INPUT) | IP66 PROTECTION | AFCI + PID RECOVERY | LUNA2000 BATTERY COMPATIBLE

Download PDF Datasheet

WhatsApp Us

Technical Specifications


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


## Technical Specifications

| Parameter | SUN2000-12KTL-M5 | SUN2000-15KTL-M5 | SUN2000-17KTL-M5 | SUN2000-20KTL-M5 | SUN2000-25KTL-M5 |
|---|---|---|---|---|---|
| **DC Input** | | | | | |
| Max DC Voltage [V] | 1100 | | | | |
| MPPT Voltage Range [V] | 200-1000 | | | | |
| No. of MPPTs | 2 | | | | |
| **AC Output** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Rated AC Power [kW] | 12 | 15 | 17 | 20 | 25 |
| Grid Connection | Three-Phase | | | | |
| Max Efficiency [%] | 98.4 | | | | |
| **General Data** | | | | | |
| Protection Degree | IP66 | | | | |
| Operating Temperature | -25 °C ~ +60 °C | | | | |
| Max Altitude [m] | 4000 | | | | |

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

## Key Features

- 98.4% Max Efficiency
- Dual MPPT (1100V Input)
- IP66 Protection
- AFCI + PID Recovery
- LUNA2000 Battery Compatible
- Intelligent Cooling

## 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

**▼ Is the M5 compatible with optimizers?**

Yes, the M5 supports SUN2000-450W-P2, SUN2000-600W-P, and MERC-600W-PA0 optimizers for module-level optimization, enabling up to 30% higher yields and long-string designs up to 40,000 Wp.

**▶ What is the warranty coverage for the Huawei SUN2000-12/15/17/20/25KTL-M5?**

**▶ What certifications does the Huawei SUN2000-12/15/17/20/25KTL-M5 have?**

**▶ What model variants are available in the SUN2000-12/15/17/20/25KTL-M5 series?**

**▶ What are the installation requirements for the Huawei SUN2000-12/15/17/20/25KTL-M5?**

**▶ How does the Huawei SUN2000-12/15/17/20/25KTL-M5 perform in hot climates?**

**▶ What are the key features of the Huawei SUN2000-12/15/17/20/25KTL-M5?**

### 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)