Huawei SUN2000-50KTL-M3

The Huawei SUN2000-50KTL-M3 is a 50kW three-phase commercial string inverter with 98.5% efficiency, 4 MPPTs, and 8 string inputs. Designed for industrial rooftops and small ground PV plants with IP66 protection.

Models Covered: SUN2000-50KTL-M3

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 | M3 COMMERCIAL SMART PV CONTROLLER (50KW) | 98.5% MAX EFFICIENCY | 4 MPPTS / 8 STRING INPUTS | IP66 RATED | PID RECOVERY | PLUG & PLAY DESIGN

Technical Specifications

Parameter	SUN2000-50KTL-M3
DC Input	
Max DC Voltage [V]	1100
MPPT Voltage Range [V]	200-1000
Startup Voltage [V]	200
Max Input Current per MPPT [A]	30
Max Input Current per String [A]	20
Max Short-Circuit Current per MPPT [A]	40
No. of MPPTs / Total Inputs	4 / 8
AC Output	
Rated AC Power [W]	50000
Max Apparent Power [VA]	55000
Rated Output Current @ 400V [A]	72.2
Nominal AC Voltage [V]	400/480
Max Efficiency [%]	98.5
European Efficiency [%]	98.0
General Data	
Dimensions (W×H×D) [mm]	640 × 530 × 270
Weight [kg]	49
Protection Degree	IP66
Operating Temperature	-25 °C ~ +60 °C
Max Altitude [m]	4000
Nighttime Consumption [W]	≤ 5.5

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

Key Features

98.5% Max Efficiency	4 MPPTs / 8 String Inputs	IP66 Rated
PID Recovery	Plug & Play Design	49kg Manageable Weight

Applications & Use Cases

Typical Applications

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

Frequently Asked Questions

▼ **How does the 50KTL-M3 compare to the 30-40KTL-M3?**

The 50KTL-M3 delivers 50kW rated power with higher input current (30A per MPPT vs 27A) and higher short-circuit current handling (40A). It is larger (640x530x270mm, 49kg) but maintains the same 4 MPPT / 8 input design.

▶ **What is the warranty coverage for the Huawei SUN2000-50KTL-M3?**

▶ **What certifications does the Huawei SUN2000-50KTL-M3 have?**

▶ **What are the installation requirements for the Huawei SUN2000-50KTL-M3?**

▶ **How does the Huawei SUN2000-50KTL-M3 perform in hot climates?**

▶ **What are the dimensions and weight of the Huawei SUN2000-50KTL-M3?**

▶ **What are the key features of the Huawei SUN2000-50KTL-M3?**

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.

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:** sales@huawei-solar.org
- **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.*

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