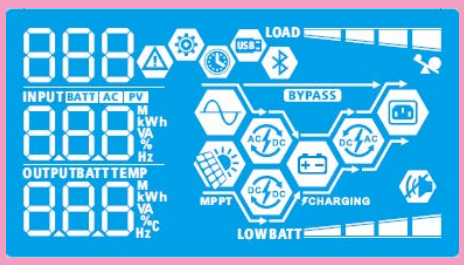
Axpert VM III Off-Grid Inverter

LCD Display Panel



• Detachable LCD control module with various communications

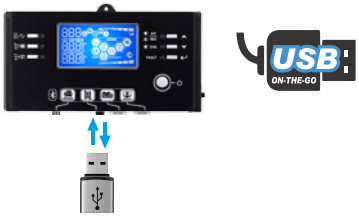
This detachable LCD control module can be turned to remote panel. Users can install the LCD panel in accessible area away from inverter up to 20 meters.

• Integrated Bluetooth interface with Android App

VM III series is integrated Bluetooth interface ready for mobile monitoring. This technology allows wireless communication up to 6~7m in an open space. Now, WatchPower App is available in google store.

• Supports USB On-the-Go function

VM III series supports USB On-the-Go function to facilitate data upload/download.



• Reserved communication port (RS-485, CAN-BUS or RS-232) for BMS

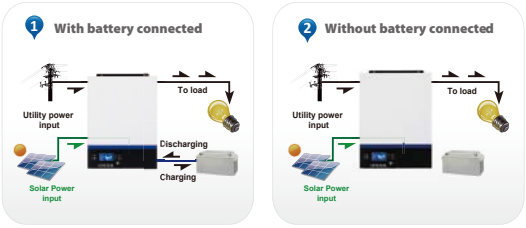
This third generation inverter is reserved communication port for BMS. For the detailed information, please contact sales directly.

• Battery equalization extends lifecycle

This inverter charger is built in battery equalization function. This function will help remove sulfation to optimize battery performance and even extend lifecycle.

• Battery independency

Inverter can keep supplying power to the loads from PV energy or the grid without battery connected.



• User-friendly LCD operation

Users can easily set up or change the charging current, output source and charger source prioritization through LCD control panel to optimize inverter performance.

• Replaceable fan design

VM III series is designed with replaceable fan. It will simplify the maintenance and reduce the maintenance cost.

Voltronic Power
Advancing Power

Axpert VM III Off-Grid Inverter Selection Guide

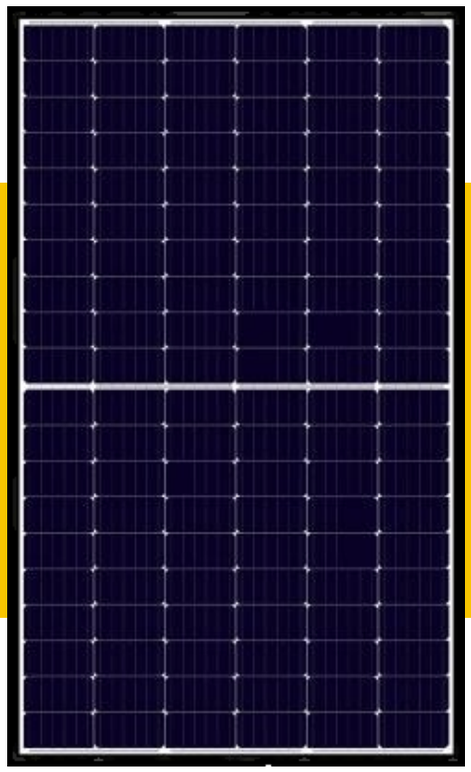
MODEL	Axpert VM III-1500-24	Axpert VM III-3000-24	Axpert VM III 5000-48
Rated Power	1500VA/1500W	3000VA/3000W	5000VA/5000W
INPUT			
Voltage	230 VAC		
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)		
Frequency Range	50 Hz/60 Hz (Auto sensing)		
OUTPUT			
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%		
Surge Power	3000VA	6000VA	10000VA
Efficiency (Peak)	90% ~ 93%		
Transfer Time	10 ms (For Personal Computers) 20 ms (For Home Appliances)		
Waveform	Pure sine wave		
BATTERY			
Battery Voltage	24 VDC		48 VDC
Floating Charge Voltage	27 VDC		54 VDC
Overcharge Protection	33 VDC		63 VDC
SOLAR CHARGER & AC CHARGER			
Solar Charger type	MPPT		
Maximum PV Array Power	2000W	4000W	5000W
MPP Range @ Operating Voltage	120 ~ 380 VDC	120 ~ 450 VDC	
Maximum PV Array Open Circuit Voltage	400 VDC	500 VDC	
Maxmum Solar Charge Current	60A	80A	
Maximum AC Charge Current	40A	60A	
Maximum Charge Current	60A	80A	
PHYSICAL			
Dimension, D x W x H (mm)	100 x 280 x 390	115 x 300 x 400	
Net Weight (kgs)	8.5	9	10
Communication Interface	USB/RS232/RS485/Bluetooth/Dry-contact		
OPERATING ENVIRONMENT			
Humidity	5% to 95% Relative Humidity (Non-condensing)		
Operating Temperature	-10°C to 50°C		
Storage Temperature	-15°C to 60°C		

Product specifications are subject to change without further notice.

München Energieprodukte
MAXIMALENERGIE

MSMDxxxM6-60
166 M6 cells half cut

360W–380W



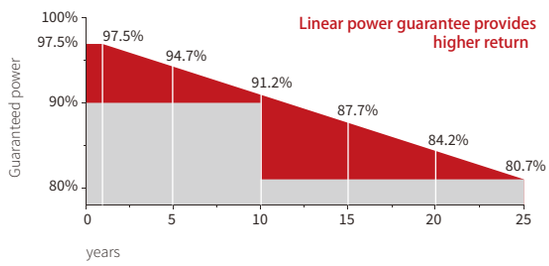
KEY FEATURES

- **Class A fire resistants (industry standard class C)**
- Outstanding performance in low-light conditions
- Low temperature coefficient (Pmax): -0.35 % / °C
- +5W — 0~+5W positive tolerance - to assure high output
- Lower internal current, lower hot spot temperature
- Cell crack risk limited in small region, enhance the module reliability
- PID FREE — Excellent anti-PID module design, TÜV SÜD certified
- Certified to withstand high wind loads (3600pa) and snow loads (8000pa)
- Salt mist and ammonia corrosion resistant

PRODUCT CERTIFICATES

WARRANTY

- Our linear power guarantee
- Standard linear power guarantee



15 years Enhanced product guarantee on product and workmanship

25 years Linear power output warranty

info@muenchen-energieprodukte.de

MSMDxxxM6-60

ELECTRICAL CHARACTERISTICS

STC	360	365	370	375	380
Maximum Power at STC (Pmax)	360 W	365 W	370 W	375 W	380 W
Optimum Operating Voltage (Vmp)	33.9 V	34.1 V	34.3 V	34.5 V	34.7 V
Optimum Operating Current (Imp)	10.62 A	10.71 A	10.79 A	10.86 A	10.95 A
Open Circuit Voltage (Voc)	40.5 V	40.7 V	40.9 V	41.2 V	41.4 V
Short Circuit Current (Isc)	11.35 A	11.42 A	11.49 A	11.56 A	11.63 A
Module Efficiency	19.4%	19.7%	20.2%	20.5%	20.7%
Operating Module Temperature	-40 °C to +85 °C				
Maximum System Voltage	1500 V DC (IEC)				
Maximum Series Fuse Rating	20 A				
Power Tolerance	0/+5W				

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5; Tolerances of Pmax, Voc and Isc are all within +/- 5%.

NMOT	360	365	370	375	380
Maximum Power at NMOT (Pmax)	270.7 W	274.3 W	278.2 W	282.1 W	286.5 W
Optimum Operating Voltage (Vmp)	31.6 V	31.8 V	32.0 V	32.2 V	32.4 V
Optimum Operating Current (Imp)	8.56 A	8.48 A	8.69 A	8.76 A	8.84 A
Open Circuit Voltage (Voc)	38.4 V	38.5 V	38.7 V	38.9 V	39.1 V
Short Circuit Current (Isc)	9.04 A	9.10 A	9.17 A	9.24 A	9.31 A

NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s.

TEMPERATURE CHARACTERISTICS

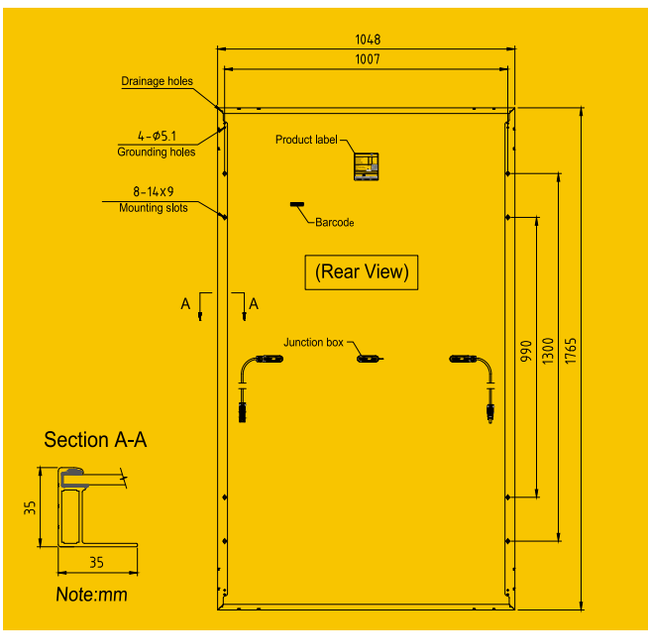
Nominal Module Operating Temperature (NMOT)	42±2°C
Temperature Coefficient of Pmax	-0.35 %/°C
Temperature Coefficient of Voc	-0.304 %/°C
Temperature Coefficient of Isc	0.050 %/°C

MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline silicon 166 mm (9BB)
No. of Cells	120 (6 × 20)
Dimensions	1765 x 1048 x 35 mm
Weight	20.0 kgs
Front Glass	3.2 mm
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm², symmetrical lengths (-) 1200 mm and (+) 1200 mm

PACKING CONFIGURATION

Container	20′ GP	40′ HC
Pieces per pallet	30	30+1
Pallets per container	6	26
Pieces per container	180	806



Current-Voltage & Power-Voltage Curve (370S)