

THE POWERHOUSE WITHIN.

At the heart of your energy system, it brings
solar conversion, battery integration, and
backup together.

VMIO-16.8K48L1

HYBRID INVERTER



VMIO - SERIES
48V/16800VA

FEATURES



High-Efficiency Power Generation

- Maximum Conversion Efficiency: 97.6%
- Wide MPPT Voltage Range: 85~450Vdc
- Dual MPPT 36A+36A
- PV input MAX.:24KW



Safe and Reliable

- IP54 Protection Rating, Reliable Quality
- 3-year Warranty, Use with More Confidence



Intelligent Operation and Maintenance

- Intelligent standby, no worry about power consumption
- Intelligent terminal management, real-time control of system data
- Support OTA remote upgrade and setup, low operation and maintenance cost



User-Friendly

- Wide-angle LCD display
- Compact and lightweight design, easy to install
- Compatible with various batteries, flexible storage options
- Maximum 12 units in parallel

ITEMS		VMIO-16.8K48L1
PV (DC Input)	Recommended max. PV input power	25200W (12600W+12600W)
	Max. input voltage(Voc)	500Vdc
	MPPT operating voltage range	85-450Vdc
	Number of MPPT	2
	No. of Strings per MPPT Tracker	2
	Max. input current of MPPT	36A+36A
	Max. short-circuit current per MPPT	54A+54A
Grid (AC Input)	Max input power	27600W
	Max input current	120A
	Rated grid voltage	230Vac
	Rated grid frequency	50/60Hz
	Acceptable range	170-280Vac (for UPS);90-280Vac (APL)
Battery Parameters (Bidirectional)	Battery type	Lead-acid or Lithium-ion
	Battery voltage range	40-60Vdc
	Rated Battery Voltage	48 Vdc
	Max. charge/discharge current	300A/300A
	BMS communication mode	RS485; CAN
Back-up Output (AC output)	Rated output power	16800W / 16800VA (Twin output)
	Rated output current	73A
	Rated output voltage / Frequency	220/230/240V (L,N,PE) 50Hz / 60Hz
	Parallel capacity	Up to 4 units, 67.2kW, single phase / Up to 12 units, 201.6kW, three phase
	Surge power	2 times of rated power, 5s
	THDv (@ linear load)	< 3%
	Switching time	10ms(typical) UPS mode 20ms(typical) APL mode
Efficiency	Peak efficiency	97.6%
	Max. MPPT efficiency	>99%
Protection	Inner protection	AC Output Overvoltage Protection, AC Output Short Circuit Protection, AC Output Overcurrent Protection, DC Component Monitoring
	Surge protection	TYPE III(DC), TYPE III(AC)
	IP rating	IP54
General Parameters	Operating temperature range	-10 to +60°C
	Relative humidity range	5%-95%
	Max. operating altitude	>2000m derating
	Standby self-consumption	<20W
	Installation type	Wall-mounted
	Cooling mode	Intelligent Air Cooling
	Communication	RS485;CAN; Wi-Fi;Dry Port
Mechanical Specifications	Display	4.3-Inch Colorful Touch Screen LCD
	Inverter dimensions (L*W*H)	639*524*129MM
	Net weight	30.8kg
	Carton dimensions (L*W*H)	778*629*213MM
	Gross weight	35.1kg
	Warranty Period	3 years