

Oasis

POWERFUL. SMART. ROBUST

The Oasis inverter range offers a cost-effective and reliable solution to the home or farm owner faced with unreliable or no grid electricity supply.

The inverter operates at low-voltage DC and is transformer-based, which translates to a robust and safe product that guarantees trusted power in the harshest environments.

- ✓ Designed for harsh environments
- ✓ 3, 4 and 6kVA
- ✓ 1-phase transformer-based
- ✓ Low-voltage DC (24, 36 & 48V)

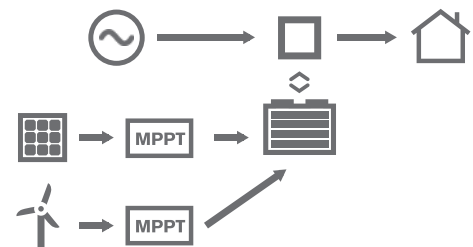


Features

Typical Off-grid or Self-consumption Application

The Oasis inverter is ideal for off-grid installations where the renewable source of power is fed directly into the batteries. The Oasis converts the battery power into clean AC power that the load can use. The built-in battery charging function allows the use of a backup generator or the grid without the need for external battery chargers.

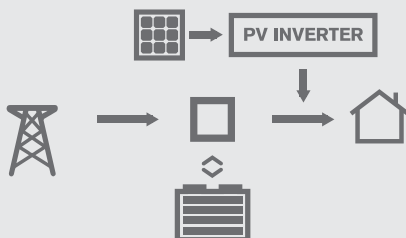
The Oasis can be configured to maximise self-consumption of renewable power by disconnecting from the grid during specified times, enabling optimal use of all available renewable power.



Typical Grid-tied Application

The Oasis inverter will act as a backup supply to provide power from the batteries in the event of a grid failure.

Installing a solar PV inverter on the load side will allow efficient use of solar energy and any excess generated power will automatically be used to charge the batteries or be exported to the grid.



Basic Generator or Load Control

In off-grid systems, the Oasis inverter can automatically start the generator when the battery voltage is low or an overload occurs. The Oasis synchronises with the generator before connecting the load smoothly. When the charge cycle is complete, or when the overload disappears, the Oasis will turn off the generator and transition smoothly back to stand-alone mode.



The Oasis can also be used to turn on / off specific loads based on low battery voltage or overload.

Specifications

SYSTEM RATINGS

	Oasis 324	Oasis 436 / 448	Oasis 636 / 648
Rated Voltage / Frequency	1ø / 230 V / 50 Hz	1ø / 230 V / 50 Hz	1ø / 230 V / 50 Hz
Rated Output Power	3 kVA / 3 kW	4 kVA / 4 kW	6 kVA / 6kW
Rated Output Current	13 A (40 A with AC source)	17 A (40 A with AC source)	26 A (60 A with AC source)
Maximum output current	19 A (for 30s), 26 A (for 2s), 40 A (with AC source)	26 A (for 30s), 34 A (for 2s), 40 A (with AC source)	39 A (for 30s), 52 A (for 2s), 60 A (with AC source)
THD V (at rated power)	< 5 %	< 5 %	< 5 %
Protection	Surge, Overload, Short circuit, Over temperature, Reverse power, Low / High battery voltage		

AC INPUT

	Oasis 324	Oasis 436 / 448	Oasis 636 / 648
Input Voltage Range	185 .. 250 V	185 .. 250 V	185 .. 250 V
Input Frequency Range	42 .. 65 Hz	42 .. 65 Hz	42 .. 65 Hz
Rated Input Current	40 A	40 A	60 A

DC SPECIFICATIONS

	Oasis 324	Oasis 436 / 448	Oasis 636 / 648
Battery Voltage (Nominal)	24 V	36 / 48 V	36 / 48 V
Charging Voltage	28.2 / 29.4 V	42.3 / 44.1 V (36 V) and 56.4 / 58.8 V (48 V)	
Charging current	25 / 50 A	25 / 50 A (36 V) & 20 / 40 A (48 V)	30 / 60 A (36 V) & 25 / 50 A (48 V)
Battery Technology	Lead Acid / Li-Ion ¹		

1. Please contact MLT Inverters for details on supported technologies

CONNECTORS

	Oasis 324	Oasis 436 / 448	Oasis 636 / 648
DC Input (1.5m Cable Included)	10 x 35 mm ² Lug	10 x 35 mm ² Lug	10 x 50 mm ² Lug
AC Output	10 mm ² Terminal Block	10 mm ² Terminal Block	16 mm ² Terminal Block

EFFICIENCY

	Oasis 324	Oasis 436 / 448	Oasis 636 / 648
Efficiency	Up to 94 %	Up to 94 %	Up to 94 %
No Load Power Consumption (On)	< 30 W	< 40 W	< 40 W
No Load Power Consumption (Load Sense)	5 W	6 W	6 W

GENERAL SPECIFICATIONS

	Wall Mounted (mounting bracket provided)		
Mounting Method	Wall Mounted (mounting bracket provided)		
Dimensions (W x H x D)	354 x 583 x 214 mm 442 x 664 x 302 mm (boxed)	354 x 583 x 214 mm 442 x 664 x 302 mm (boxed)	391 x 670 x 222 mm 474 x 745 x 316 mm (boxed)
IP/NEMA Rating	IP20 / NEMA1	IP20 / NEMA1	IP20 / NEMA1
Colour	RAL 9002 / RAL 9011	RAL 9002 / RAL 9011	RAL 9002 / RAL 9011
Weight	40kg	40kg	57kg
Architecture	Galvanically isolated, Forced air cooling		

CLIMATIC CONDITIONS

Ambient Temperature	-5 .. 45 °C
Ambient Transport Temperature	-25 .. 70 °C
Maximum Ambient for Rated Power	40 °C
Relative Humidity (Non-Condensing)	5 .. 85 %
Maximum Altitude for Rated Power	1000 m above sea level (Power derated for High Altitude)

OPERATOR PANEL

Display Type	Full Colour Touch Screen 4.3 inch Liquid Crystal Display Recording of the last 24h source power, load power and battery state of charge Event logs
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Accessories:

- Remote Monitoring & Control
- Floor Stand
- Installation Kit
- Lead-acid battery enclosure

Distributor / Installer
Contact Details



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