



# Sunny Roo 5000TL

## Sunny Roo Transformerless Inverter Series

Sunny Roo Inverters combine elegant design with ease of operation. With 96% High Efficiency Conversion with our transformerless design and IP65 waterproof enclosure, the Sunny Roo TL Series Inverters take care of accurate power conversion from solar panels to the grid with minimum power loss and maximum reliability.

### GENERAL TECHNICAL FEATURES

- Maximum power point tracking (MPPT)
- High energy efficiency, higher than 96%
- Very low harmonic distortion, THD < 4%
- Direct mains connection
- Unlimited parallel connection arrangements
- Anti-islanding protection with automatic shut down
- Monitoring from front of the unit
- Easy installation and parameterisation
- Protection against: inverse polarisation, short-circuits, overvoltages, isolation failure
- Service life of more than 20 years
- Remote control system (SWS): remote communications programme,
- Parameter display, inverter records control, etc.

### ADVANTAGES

- Range of input voltages (120-500 VDC)
- RS-485 communications included
- Parameters visualised by means of display
- Protections
- No separate Data logger required
- Compact size, light weight



**CERTIFICATES**  
AS/NZS 3100 and AS4777

### PERFORMANCE

- Modern transformerless design for low noise
- High energy efficiency rating of 96%
- Optional additional add-ons like our exclusive EMD (Energy Management Device) to track your systems performance in detail
- Complete cover with our 5 year replacement warranty
- Comprehensive Digital LCD display for quick easy operation

# Specifications

## Sunny Roo 5000 TL Inverter Series

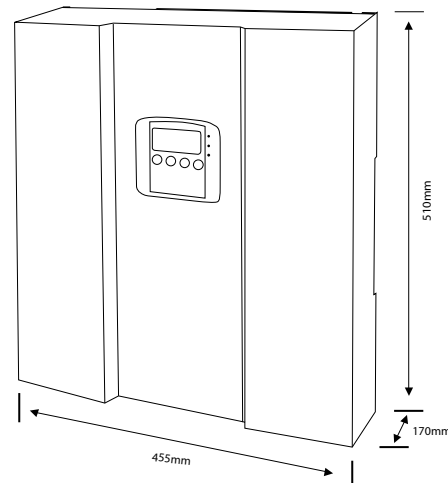
### Electrical Characteristics

#### Sunny Roo 5000 kVA (3 phase) T/TL \*

Nominal output power (1)	5KW
<b>System</b>	
Conversion mode	High frequency PWM
Isolation method	Low loss transformer (optional)
<b>DC Input</b>	
Nominal DC voltage	360V
Maximum DC voltage	500V
Operating range DC	120-500V
Operating range DC for MPPT	150-450V (2)
No. input circuits	2 (17.65A Max. x circuit)
<b>AC Output</b>	
No. phases/No. wires	1-phase/2-wires or 1-phase/3-wires (LNG)
Nominal voltage AC	230V
Nominal frequency	50 o 60 Hz
Nominal output current AC	21.7 A
Harmonic distortion range for nominal current	Total harmonic current
	Partial harmonic current:
	(at nominal output current)
Power factor	Over 0.99 (at nominal output current)

### Dimensions

(in mm)



### Efficiency

96%

### Protection

Input	Ground fault/DC isolation fault/ islanding
Output	over-undervoltage/Over-under frequency
Protection class	IP 45

### Island mode detection

Passive method	Phase jump detection
Active method	Reactive power control

### Interface

RS232 (standard) / USB / RS485 / Dry contact / TCP / IP (optional)

### Standards And Safety

Applicable European standards

EN 61000-3-2

GS Certificate

Electromagnetic Compatibility Directive

EN 61000-6-3,4

EN 55022

Low Voltage Directive

EN 50178

IP Standard

EN 60529



**Certificates**

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### Environmental characteristics

Temperature	-10°C to +50°C/ -13°F to 122°F
Relative humidity	0-90% without condensation
Altitude	< 2000m

### Mechanical characteristics

Dimensions	170x455x510
Weight (kgs/lbs)	25/55
Cooling	Free convection

(1) Maximum power up to 45oC room temperature.

(2) Power derating protection at low DC input & high room temperature.

