

SOLAR

MICROTEK
TECHNOLOGY WE LIVE

**365 DAYS
OF FREE ELECTRICITY**



NOW
MICROTEK
GRID-TIED INVERTERS
with **10 YEARS**
of **ONSITE WARRANTY**

ADVANTAGE MICROTEK SOLAR

- 1) Trust of India's leading Power Products Manufacturer.
- 2) In-Built Zero Export*.
- 3) On Site Warranty.
- 4) 10 Years Warranty.
- 5) Site Inspection*.
- 6) Electronics Installation*.



GRID-TIED INVERTER 1KW to 50KW

GRID-TIED SOLAR PCU

Microtek M-SUN GRID-TIED solar power is a PCU with Grid-Tie functionality. MPPT Based Technology Grid Tie Wall mounted solar system that converts solar energy into electricity. Excess generation of electricity for the solar panel will be exported to Utility Grid if there is active Net Metering Policy in state.

RENEWABLE SOLAR ENERGY

GRID-TIED SOLAR PCU



MICROTEK GT1KW, GT2KW, GT3KW, GT5KW, GT5.5KW, GT11KW and GT20KW

NOW ALSO AVAILABLE GT 30KW, & GT40KW



MOBILE APP
FOR LIVE MONITORING



SD CARD INSIDE
FOR LIFE LONG DATA STORAGE



DC SWITCH
FOR SOLAR PV ISOLATION

MICROTEK High-Yield, Flexible and Economical SOLAR GRID-TIED PCU

- 4" LCD Display, Interface Selection, Wi-Fi / RS485 for more flexible configuration and System Monitoring. Low Maintenance cost.
- Max 97.2% Efficiency, Real Time Precise MPPT algorithm for BEST Performance.
- Wide Input Voltage Operation Range.
- Plug & Play Easy Installation & Maintenance, IP65 for Free Site Selection.
- Intelligent Grid Management, Reactive Power Capability & Self Power Reducer when Over Frequency.
- SD Card inside for Life Long Data Storage upto 25 Years.
- Zero Export to Grid Kit (Optional).



GRID-TIED SOLAR PCU

TECHNICAL SPECIFICATIONS (SINGLE PHASE GRID-TIED SOLAR PCU)

MODEL	GT 1KW	GT 2KW	GT 3KW	GT 5KW
INPUT (DC)				
Max.Input Power/Number of MPPT	1100W/1MPPT	2200W/1MPPT	3000W/1MPPT	5200W/2MPPT
Max.Input Voltage/Start-up I/P Voltage /Rated I/P Voltage	450V/100V/360V	500V/120V/360V	550V/120V/360V	600V/120V/360V
MPPT Voltage Range	80V~450V	100V~500V	100V~550V	100V~580V
Full Load DC Voltage Range/Max.Input Current per MPPT	110V~450V/10A	170V~500V/13A	200V~500V/15A	175V~520V/15A
OUTPUT (AC)				
Rated Power/Max.AC Power/Max.AC Output Current	1000W/1000VA/4.5A	2000W/2000VA/9.5A	3000W/3000VA/13A	5000W/5000VA/22A
Nominal Grid Voltage & Grid Voltage Range	230V / 180V to 270V(Adjustable, must meet Local Grid Requirements)			
Nominal Frequency/Grid Frequency Range	Nominal:50Hz/60Hz, Grid:47~53Hz/57~63Hz (According to Local Standard)			
THDi/Power Factor/Grid Connection	<3% / 1 (Adjustable±0.8) / Single Phase			
Power Limit Export	Zero Export or Adjustable Power Limit Export (Optional)			
EFFICIENCY				
Max.Efficiency	> 99.5%	97%/96.1%	97.2%/96.5%	97.60%
MPPT Adaptation Efficiency	> 99.5%			
PROTECTIONS				
<p>PCU GT1KW,2KW & 3KW: Anti-islanding Protection, DC Reverse Polarity Protection, DC Switch, Over Temp. Protection,Over Voltage Protection,Over Current Protections,Leakage Current Protection and Earth Fault Protection.</p> <p>PCU GT5KW: DC Reverse Polarity Protection,DC Switch, Protection Class/Over Voltage Category:(I/III),Input/Output MOV(III),Safety Protections:Anti-islanding,RCMU and Ground Fault Monitoring.</p>				
Degree of Protection	IP65			
Topology	Transformerless			
COMMUNICATION				
Standard Communication Mode/Operation Data Storage	RS485,Wi-Fi , SD Card (Optional) /25 Years			
AMBIENCE PARAMETERS				
Operating Temperature -25° C +60° C/Acoustic Noise : <25dB @1m Allowable Relative Humidity range : 0 to Max 95% no condensing, Max. Operating Altitude:2000m				
DIMENSIONS (LxWxH) in mm	405x314x135	405x314x135	405x314x135	478x344x170
WEIGHT	11 Kgs	12 Kgs	12 Kgs	19 Kgs
WARRANTY	5 Years			

GRID-TIED SOLAR PCU

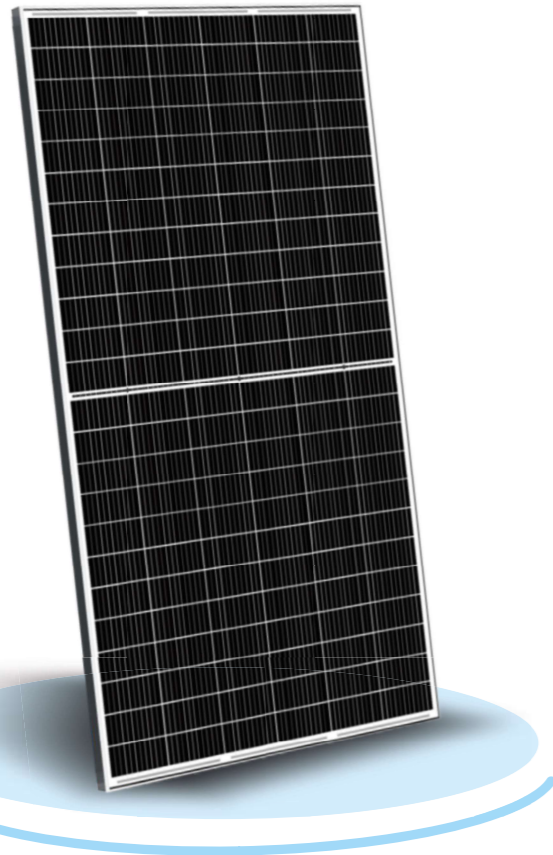


TECHNICAL SPECIFICATIONS (THREE PHASE GRID-TIED SOLAR PCU)

MODEL	GT 5.5KW	GT 11KW	GT 20KW	GT 30KW	GT 40KW
INPUT (DC)					
Max.Input Power/Number of MPPT	6000W/2MPPT	12000W/2MPPT	20800W/2MPPT	33000/2MPPT	44000W/2MPPT
Max.Input Voltage/Start-up I/P Voltage/Rated I/P Voltage	1000V/180V/600V	1000V/180V/600V	1000V/350/600V	1000V/350V/600V	1000V/350V/700V
MPPT Voltage Range	160V~960V	160V~960V		250V~960V	
Full Load DC Voltage Range/Max.Input Current per MPPT	240V~850V/11A	480V~850V/11A	430V~850V/24A	480V ~ 800V/32A	570V ~ 800V/35A
OUTPUT (AC)					
Rated Power/Max. AC Power/Max. AC Output Current	5000W/5500VA/8A	10000W/11000VA /15.9A	20000W/20000VA /29A	30000W/30000VA /43A	40000W/40000VA /48A
Nominal Grid Voltage & Grid Voltage Range	3/N/PE,220/380V or 3/N/PE,230/400 or 3/N/PE,240/415V & 184V~276VAC (According to local standard)	3/N/PE,220/380V or 3/N/PE,230/400 or 3/N/PE,240/415V & 180V~270VAC	3/N/PE,220/380V or 3/N/PE,230/400 or 3/N/PE,240/415V & 180V~270VAC	3/N/PE or 3/PE,230/400VAC & 320V~480VAC(Ph-Ph), 185V-277VAC (Ph-N)	3/N/PE or 3/PE,277/480VAC & 422V~528VAC(Ph-Ph), 244V-304VAC (Ph-N) **
Nominal Frequency/Grid Frequency Range	Nominal:50Hz/60Hz, Grid:50Hz,+/- 5Hz (According to Local Standard)		Nominal:50Hz/60Hz, Grid:47~53Hz/57~63Hz (According to Local Standard)		
THDi/Power Factor/Grid Connection	<3% /1 (Adjustable±0.8) / Three Phase				
Power Limit Export	Zero-Export with External Anti-Reverse Power Controller (Optional)				
EFFICIENCY					
Max.Efficiency	98%	98.30%	98.20%	98.50%	98.70%
MPPT Adaptation Efficiency	>99.9%				
PROTECTIONS					
<p>PCU GT5.5KW: DC Reverse Polarity Protection,DC Switch,Protection Class/Over Voltage Category:(I/III),Input/Output MOV(III):Optional,Safety Protections:Anti-islanding,RCMU and Ground Fault Monitoring.</p> <p>PCU GT11KW: DC Reverse Polarity Protection,DC Switch,MOV : Type III standard,Anti-islanding,RCMU and Ground Fault Monitoring.</p> <p>PCU GT20KW: DC Reverse Polarity Protection,DC Switch,Protection Class/Overvoltage Category:(I/III), Anti-islanding, RCMU, Ground Fault Monitoring.</p> <p>PCU GT30KW & GT40KW: DC Reverse Polarity Protection,DC Switch, Protection Class/Over Voltage Category:(I/III),Input/Output SPD(II): Optional, Anti-islanding, RCMU, Ground Fault Monitoring, MOV:Type III standard</p>					
Degree of Protection	IP65				
Topology	Transformerless				
COMMUNICATION					
Standard Communication Mode/Operation Data Storage	RS485,Wi-Fi, GPRS (Optional), SD Card, Multi-function relay	Rs485, Wi-Fi, GPRS (Optional), SD Card	Rs485, Wi-Fi, GPRS(Optional), SD Card, Multi-function relay		
AMBIENCE PARAMETERS					
	Operating Temperature -25°C ~+60° C/Acoustic Noise : <29dB Allowable Relative Humidity range : 0 to Max 95% no condensing, Max.Operating Altitude:2000m		Operating Temperature -25° C ~+60° C/ Acoustic Noise : <45dB Allowable Relative Humidity range : 0 to Max 95% no condensing, Max. Operating Altitude: 2000m	Operating Temperature - 25° C ~+60° C/ Acoustic Noise : <30dB Allowable Relative Humidity range : 0 to 100% no condensing, Max. Operating Altitude: 3000m	Operating Temperature -25° C ~+60° C/ Acoustic Noise : <45dB Allowable Relative Humidity range : 0 to 100% no condensing, Max. Operating Altitude: 3000m
DIMENSIONS (LxWxH) in mm	483x452x200	483x452x200	707x492x240	767x564x290.5	
WEIGHT	21 Kgs	22 Kgs	48 Kgs	50 Kgs	
WARRANTY	5 Years				

NOTE ** Only for 40KW Unit, if the Grid Voltage Range is 320V-480Vac (Ph-Ph) or 185-277VAC (Ph-N), then below 422Vac (Ph-Ph) / 244VAC (Ph-N), Inverter Capacity shall derate to 36KW.

HALF CUT MONO PERC SOLAR PANEL



Microtek Panels are made with the State of the Art technology & high grade premium components

- MBB Half-Cell Technology provides Better Performance under even Partial Shading
- Anti-Reflective (AR) Coated Glass for Enhanced Power
- Excellent Module Efficiency with Bifacial Power Gain (Applicable to Bifacial Modules)
- Pre and Post EL Checking With High Resolution Camera



Positive Power Tolerance

Ensures full energy harvesting & better return on investment



Suitable For Extreme Weather

Tempered Glass withstands dynamic wind load of 2400 Pa & Snow load of 5400 Pa
Multi EVA encapsulation for better module protection



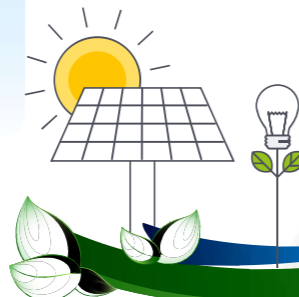
PID Free

For longer life, lower degradation & long term reliability



Ideal For

Off grid, On grid & Hybrid applications. Large scale utility plants, Rooftop, commercial, industrial & residential plants, agriculture pumping solutions



ELECTRICAL CHARACTERISTICS*

MODEL	MTK M390/24V	MTK RS535/24V DCR	MTK RSB535/24V DCR	MTK PE545HM/24V
Nominal Max. Power (Pm) in Watts	390W	535W	535W	545W
Power Tolerance	+ve Only	0 to +4.99W	0 to +4.99W	2%±
Open Circuit Voltage (Voc) in Volts	49.5V	49.64V	49.64V	49.80V
Short Circuit Current (Isc) in Amps	9.90A	13.47A	13.47A	13.98A
Voltage at Max. Power (Vmp) in Volts	41.7V	41.72V	41.72V	41.95V
Current at Max. Power (Imp) in Amps	9.36A	12.83A	12.83A	13.12A
Module Conversion Efficiency	19.40%	20.75%	20.74%	21.1%
Max. System Voltage in Volts	1500	1500	1500	1500

*Under Standard Test Conditions (STC) of 1000 W/m² irradiance, AM 1.5 spectrum and 25°C cell temperature.
** Full cell technology

MECHANICAL CHARACTERISTICS

MODEL	MTK M390/24V	MTK(DCR) RS535/24V	MTK RSB535/24V DCR	MTK PE545HM/24V
Length x Width x Thickness(LxWxT)mm	1995x1004x40	2278x1133x40	2278x1133x40	2279x1134x35
Mounting Holes Pitch (X) mm	978/1500	400/1100/1400	1100/1400	400/960/1400
Mounting Holes Pitch (Y) mm	961	1095	1095	1088
Weight (Kgs.)	22	28.6	28.6	29
Solar Cell Arrangement	72 / (12x6)	144/ (24x6)	144/ (24x6)	144/ (24x6)
Solar Cell Type	MONO PERC	MONO PERC	MONO PERC BIFACIAL	MONO PERC
Frame Material	Anodized Aluminum Cavity Frame (Screw less)	Anodized Aluminum Alloy	Anodized Aluminum Alloy	Anodized Aluminum Cavity Frame (Screw less)
Junction Box	IP67, 4-Rail, 3Diodes, 1Mtr. 4Sq.mm Wire with Connector	IP68, 3Bypass Diodes Split Junction Box	IP68, 3Bypass Diodes Split Junction Box	IP68, 4-Rail, 3Diodes, 1Mtr. 4Sq.mm Wire with Connector

*Specifications are subject to change without any notice. The company does not take liability for consequential damages.