

# SOLAR ON GRID TIE INVERTER

**selec**<sup>®</sup>  
Creating Best Value



**50kW**



**6kW, 10kW**

[www.selec.com](http://www.selec.com)

Solar On Grid Tie Inverter are power Inverters that can feed power from solar panels directly to grid. They are designed to quickly disconnect from the grid in case of Grid failure.

## KEY FEATURES OF SELEC SOLAR ON GRID TIE INVERTER



Anti-Islanding protection



Wider MPPT range



Low start-up voltage



>97% Efficiency



Ingress protection



Natural cooling convection



Remote monitoring

### TECHNICAL SPECIFICATIONS

SYSTEM	SINGLE PHASE
<b>RATINGS</b>	3kW
<b>MODEL</b>	GTI003WLM1PW
<b>INPUT SPECIFICATIONS (DC)</b>	
Max. DC Input Power (kW)	3
Max. Allowable PV Power (kW)	4.2
Nominal PV voltage (V)	360
Max. DC Input Voltage (V)	600
Start-up Voltage (V)	80
Operating Range (V)	65-550
MPPT Voltage range (V)	65-550
Max input current per MPPT (A)	13
Number of MPPT	1
Max Input Strings Number	1
Maximum PV short circuit current per MPPT (Isc)	16
<b>OUTPUT SPECIFICATIONS (AC)</b>	
Rated output power (kW)	3
Max. output power (kW)	3.3
Nominal AC current, RMS (A)	13.6 / 13
Max. output Current (A)	15
Grid voltage range (V)	230 +/- 20%
Grid Frequency range (Hz)	50/60 Hz (45-55Hz/55-65 Hz)
Power Factor (at rated output power)	~ 1 (Adjustable from 0.8 leading to 0.8 lagging)
Total harmonic distortion (THDi)	<3% at rated load
Feed-in phase/connection phase	Single Phase
<b>EFFICIENCY</b>	
Max. Efficiency	97.6
MPPT Efficiency	>99.5
Euro Efficiency	97.1
<b>PROTECTIONS</b>	
DC Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
Over Current Protection	Yes
Over voltage/ Under Voltage protection	Yes
Over frequency/Under Frequency	Yes
Insulation resistance monitoring	Yes
Residual current detection	Yes
Surge protection	Yes
Islanding Protection	Yes
Temperature Protection	Yes
Integrated DC Switch	Yes
Integrated AFCI (DC arc-fault circuit protection)	Optional

## TECHNICAL SPECIFICATIONS

SYSTEM	SINGLE PHASE
<b>INTERFACE</b>	
DC Connection	MC4 Connectors
Display	LCD & LED
Datalogger & Communication	RS485/Wi-Fi/GSM* (Optional)
<b>GENERAL DATA</b>	
Topology	Transformerless
Consumption @ night (W)	<1 W
Operating Temperature Range	-25°C to 60°C
Cooling Method	Natural convection
Relative Humidity	0 to 100% non-condensing
Max. Operational Altitude	4000 m
Noise (dBA)	<25 dBA
<b>Designed Lifetime</b>	
Warranty	5 - 10years
Ingress Protection	IP65
Dimensions in mm (W*H*D)	280*260*140
Net weight (Kg)	7
Mechanical Integration	Wall mountable

## TECHNICAL SPECIFICATIONS

SYSTEM	THREE PHASE			
RATINGS	6kW*	10kW*	50kW	100kW
<b>MODEL</b>	GTI006WLM3PW	GTI010WLM3PW	GTI050WLM3PW	GTI100WLM3PW
<b>INPUT SPECIFICATIONS (DC)</b>				
Max. DC Input Power (kW)	6	10	50	100
Max. Allowable PV Power (kW)	7.5	12.5	75	150
Nominal PV voltage (V)	630		600	
Max. DC Input Voltage (V)	1000		1100	
Start-up Voltage (V)	180		200	
Operating Range (V)	160 - 1000		200 - 1000	
MPPT Voltage range (V)	160 - 1000		200 - 1000	
Max input current per MPPT (A)	11.6 / 11.6		26	26
Number of MPPT	2		5	10
Max Input Strings Number	2		2	2
Maximum PV short circuit current per MPPT (Isc)	16		50	40
<b>OUTPUT SPECIFICATIONS (AC)</b>				
Rated output power (kW)	6	10	50	100
Max. output power (kW)	6.6	11	55	110
Nominal AC current, RMS (A)	8.33	13.9	76.0 / 72.2	152.0 / 144.3
Max. output Current (A)	10	16	83.3	167
Grid voltage range (V)	320 - 480		277 - 460 (adjustable)	
Grid Frequency range (Hz)	50/60 Hz (45-55Hz/55-65 Hz)			
Power Factor (at rated output power)	~ 1 (Adjustable from 0.8 leading to 0.8 lagging)			
Total harmonic distortion (THDi)	<3% at rated load			
Feed-in phase/connection phase	Three Phase			
<b>EFFICIENCY</b>				
Max. Efficiency	98.3		98.9	99
MPPT Efficiency	>99.5%		>99.9%	
Euro Efficiency	97.7	97.9	98.4	98.6
<b>PROTECTIONS</b>				
DC Reverse Polarity Protection	Yes			
Short Circuit Protection	Yes			
Over Current Protection	Yes			

NOTE : \* BIS Certified



## TECHNICAL SPECIFICATIONS

SYSTEM	THREE PHASE		
Over voltage/ Under Voltage protection	Yes		
Over frequency/Under Frequency	Yes		
Insulation resistance monitoring	Yes		
Residual current detection	Yes		
Surge protection	Yes		
Islanding Protection	Yes		
Temperature Protection	Yes		
Integrated DC Switch	Yes		
Integrated AFCI (DC arc-fault circuit protection)	Optional		
<b>INTERFACE</b>			
DC Connection	2 Pairs of MC4	MC4 Connectors	H4/MC4(Optional)
Display	LCD (16 x 2)	LCD with LED indications	
Datalogger & Communication	RS485/Wi-Fi/GSM* (Optional)	RS485/Wi-Fi/GPRS*/PLC* (Optional)	
<b>GENERAL DATA</b>			
Topology	Transformerless		
Consumption @ night (W)	< 1W		
Operating Temperature Range	-25°C to 60°C		
Cooling Method	Natural convection		
Relative Humidity	0 to 100% non-condensing		
Max. Operational Altitude	3000 m	4000 m	
Noise (dBA)	< 30 dBA	<60 dBA	
Designed Lifetime	> 20 years		
Warranty	5 years	10 years	
Ingress Protection	IP65		
Dimensions in mm (W*H*D)	500*500*200	800*600*300	
Net weight (Kg)	26 approx.	65 approx.	80 approx.
Mechanical Integration	Wall mountable		

## ORDERING INFORMATION

Product Code	Description	HSN Code
<b>SOLAR ON GRID TIE INVERTER</b>		
GTI003WLM1PW	Grid Tie Inverter - 1 Phase/ 3 kW, Wall mounted with Wifi Module	85044090
GTI006WLM3PW	Grid Tie Inverter - 3 Phase/ 6 kW, Wall mounted with Wifi Module	
GTI010WLM3PW	Grid Tie Inverter - 3 Phase/ 10 kW, Wall mounted with Wifi Module	
GTI050WLM3PW	Grid Tie Inverter - 3 Phase/ 50 kW, Wall mounted with Wifi Module	
GTI100WLM3PW	Grid Tie Inverter - 3 Phase/ 100 kW, Wall mounted with Wifi Module	

\* PRICES ON DEMAND

## APPLICATIONS



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