



# TECHSER®

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## TSG - 3 PHASE SERIES

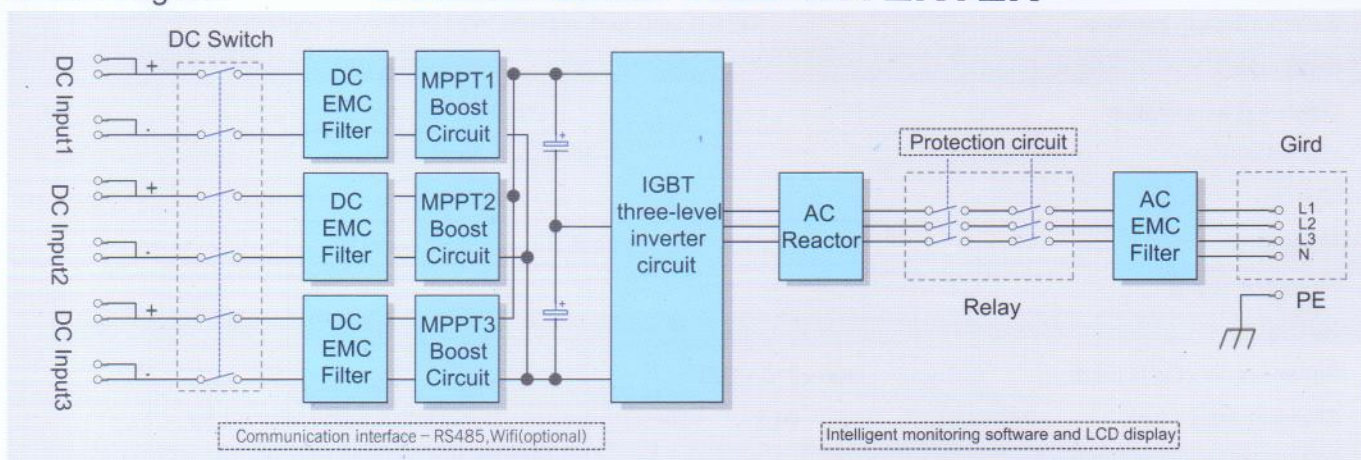
10KW-20KW

- MPPT efficiency >99.9%
- Maximum efficiency >98.2%
- Three independent MPP tracking gains optimal energy harvestig
- Low sensitivity to grid disturbances to avoid undesired disconnection from the grid
- wide range of input Voltage and operation environment
- wide DC input range from 250V up to 850V
- wide operating temperature range -20°C ~60°C
- Ip65 harshest industrial protection for indoor & outdoor
- Rs232 /RS485/Wifi interfaces
- Easy-to-read LCD display with all operational status and monitored data

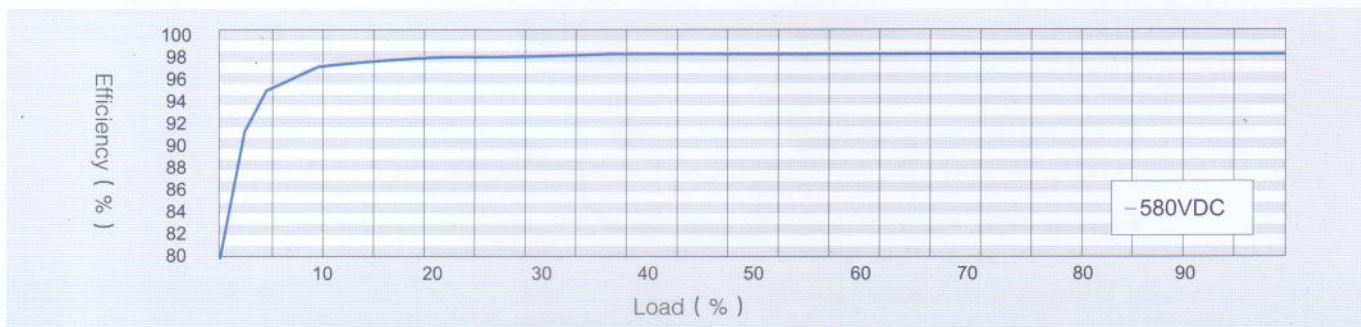


## SOLAR GRID TIED INVERTER

Circuit diagram



Efficiency curve



## TSG-3 Phase Series Technical Specifications

MODEL	TSG-10K-3	TSG-12.5K-3	TSG-15K-3	TSG-17K-3	TSG-20K-3
<b>INPUT</b>					
Max. DC input power	12KW	14KW	17KW	19KW	22KW
Max. DC input voltage	900Vdc				
MPPT tracking voltage range	250~850Vdc				
Number of MPPT tracking	2 or 3				
Max. input current for each tracking	12A x 3		17A x 3		
<b>OUTPUT</b>					
Rated output power	10KW	12.5KW	15KW	17KW	20KW
Max. AC output power	10.5KW	13KW	15.5KW	17.5KW	20.5KW
Rated output voltage	400 Vac				
Output voltage range	400V±20% (adjustable)				
AC output topology	3Ph+N+PE, Transformer-less				
Grid frequency range	50/60Hz (±5Hz), (adjustable)				
Rated output current	14.5A	18.1A	21.7A	24.6A	29A
Max. output current	17A	20A	24A	27A	30A
Power factor (cosØ)	0.9 leading~0.9 lagging				
Total harmonic current distortion (THDi)	<3%				
<b>SYSTEM FEATURES</b>					
Max. efficiency	>98.0%	> 98.0%	>98.1%	>98.1%	>98.2%
Euro efficiency	>97.5%	> 97.5%	>97.6%	>97.6%	>97.7%
MPPT efficiency	99.9%				
Standby (night time) losses	<0.2W				
Cooling	Forced air cooling				
DC switch	Optional				
Communication interface	RS485 standard, external WiFi or Ethernet (optional)				
<b>ENVIRONMENTAL</b>					
Operating temperature	-20°C~60°C				
Humidity range	0~95% (non-condensing)				
Altitude	2000m				
Noise level	<40dB (1 meter from surface)				
Protection rating	IP65				
<b>PHYSICAL</b>					
Dimension W x D x H (mm)	506 x 210 x 695		522 x 210 x 720		
Shipping weight (kg)	46.5		50		
<b>STANDARDS</b>					
Energy Efficiency as per MNRE - IEC61683			Ingress Protection -IP - 65 as per IEC 60529		
Environmental as per MNRE - IEC 60068 -2 (1,2,14,30)			Safety : IEC 62109		
Anti- Islanding Protection/Grid Resolution - IEC62116			EMC - IEC 61000		

Specifications subject to change without prior notice.

TECHSER reserves all right to specifications and are subject to change without prior notice

## TECHSER POWER SOLUTIONS PVT. LTD.

Corporate Office: #12/1, 5 th Cross, MES Road, Jalahalli, Bengaluru - 560013 Karnataka, INDIA

Email: bangalore@techser.com URL: www.techser.com

UNIT I : #17/B, Hootagalli Industrial Area, Hootagalli, Mysore-570018  
Tele Fax: 081 0821 2344990

UNIT II : HIG-24B, Sector 1 Parwanoo-173 220 Himachal Pradesh, INDIA.  
Tel: 01792-325566, Tele Fax: 01792-232520.