



# TGC SERIES

## SOLAR CONVERTER

### DSP CONTROL

*The new Tescom solar converter provides the ability of harvesting solar power for UPS systems. Tescom Solar Converter is specifically designed for operating in conjunction with Tescom DS|Power range UPS systems. With the use of advanced Maximum Power Point Tracking (MPPT) algorithms, high levels of efficiency and reliability is achieved. Tescom Solar Converter can be used in parallel with one UPS allowing higher solar power harvesting with single UPS unit.*

### GENERAL SPECIFICATIONS

- High efficiency with advanced MPPT algorithm
- Wide solar voltage input range
- Overload protection
- Short circuit protection at load side
- Soft start function
- External EPO switch input
- RS232 interface
- CAN bus interface
- Adjustable output current limit
- High charge current capacity
- Can be used in parallel
- LCD panel orientation can be changed
- Central DSP controlled structure
- Rack and wall mount options
- Voltage range selection
- Separate battery supported RTC (real time clock)
- Enhanced diagnostic
- IGBT technology
- Soft start algorithm
- Adjustable PV voltage failure limit
- Adjustable PV voltage high limit
- Flexible battery quantity
- Adjustable battery charging current limit
- Temperature compensation for battery charging
- Power limiting at 110% at the output
- Short circuit protection
- Output fuse protection
- Adjustable output voltage
- Interactive control command protection
- LCD front panel, 2 buttons, indicator lamp and buzzer on front panel
- Modbus adaptor (optional)
- 128 events (5000 alarms) logging with time and date
- 2 year warranty
- 10 years spare parts support





# TECHNICAL SPECIFICATIONS

MODEL	TGC-1105A	TGC-1210A
<b>INPUT</b>		
MPPT Operating range	200 – 400 VDC	500 – 800 VDC
Maximum input current	25 Adc	
Max. PV array short circuit current	50 Adc	
Max. PV array open circuit voltage	400 VDC	800 VDC
Night-Time power consumption	20 W	20 W
<b>OUTPUT</b>		
Nominal battery voltage	405 Vdc	± 405 Vdc
Max. PV array power	5000 W	10000 W
Ripple voltage	< ± %0,5	
Efficiency	> %96	
Poles	1	2 (Positive and Negative)
<b>DISPLAY</b>		
Status on LCD	Two line, 16 character LCD provides instantaneous power, lifetime energy production, PV array voltage and current, charging voltage and current, and alarm and fault messages	
Status on LED	Status LED	
<b>PROTECTION</b>		
Overload	Input and output current limit, and short circuit protection	
Short circuit at load side	Input Current > 50 A	
<b>ALARMS</b>		
Visible	LCD and LED indicators	
Audible	Yes	
<b>PHYSICAL CHARACTERISTICS</b>		
Dimensions WxHxD mm	135x420x520	
Input/Output connections	Hardwired	
<b>ENVIRONMENT</b>		
Operating temperature range	0°C – 40°C	
Storage temperature	0°C – 40°C	
Altitude	1000m @ nominal power	
Humidity	< 90% (non-condensing)	
<b>INTERFACE</b>		
RS232 COM port	Standard	
RS485 port	Optional	
CAN interface	Standard	
PC software	Available	
<b>COMPLIANCE</b>		
Quality standard	ISO9001	