



10 - 20 - 40 kW

TSC SERIES

SOLAR CONVERTER

Tescom Solar

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
- 5 years spare parts support





SOLAR CONVERTER TECHNICAL SPECIFICATIONS

MODEL	TSC-010	TSC-020	TSC-040
INPUT			
MPP voltage range	100-600V		100-300V
MPP voltage range for full power	400-600V		200-300V
Maximum input Voc	620V		300V
Start-Up DC input voltage (Vstart)	200V		150V
Maximum input current	25A-DC	50A-DC	100A-DC
Maximum input Isc	40A	80A	120A
Number of MMPT tracker	1		2
Suggested PV power for input	2000W< S.P. <15000W	2000W< S.P. <25000W	4000W< S.P. <50000W
Night energy consumption	5W		10W
OUTPUT			
Maximum output power	10kW	20kW	40kW
Rated output voltages	± 405VDC		
Maximum output currents	±16,6A	±33,3A	±66A
Efficiency	> 96%		> 97%
Poles	3 poles (Positive, negative, neutral)		
FRONT PANEL			
Panel features	Panel features 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		
COMMUNICATION			
RS232	Standard		
RS485	Standard		
CAN	Standard		
PC software	Standard		
MECHANICAL DATA			
Dimensions (HxWxD)	(3U)133x430x490		(3U)133,5x454x815
Weight (kg)	17,5		31
Mounting system	Wall Bracket/Cabinate System		
Connection type	Both Input and Output 800V 10mm ² Terminals		Both Input and Output 800V 35mm ² Terminals
ENVIRONMENT CONDITION			
Operating temperature	0°C – 50°C		
Storage temperature	0°C – 50°C		
Altitude	1000m @ nominal power		
Humidity	< 90% (non-condensing)		
COMPLIANCE			
Quality standard	ISO9001		
PROTECTIONS			
Input	Optional 1000V-DC Lightning/surge arrester and 1000V 50-100A Fuse		
Output	700V 50A Fuse		700V 100A Fuse