



10 - 20 - 40 kW

TSC 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
- 5 years spare parts support





SOLAR CONVERTER TECHNICAL SPECIFICATIONS

MOREL TSC-010 TSC-020 TSC-020 TSC-020					
MPP voltage range 100-600V 100-300V 203-300V Members 200	MODEL	TSC-010	TSC-020	TSC-040	
Membran for full power	INPUT				
Maximum input Voc G20V 300V 150V	MPP voltage range	100-	100-600V		
2007 1507	MPP voltage range for full power	400-1	400-600V		
Maximum injust current	Maximum input Voc	62'	620 V		
Maximum input its	Start-Up DC input voltage (Vstart)	20	200V		
Number of MMPT tracker Supested PV power for input. Supested PV power for input. 2000W< S.R. <15000W Night energy consumption SW 10W OUTPUT Maximum output power Rated output voltages 10NW 20NW A0NW Ration output power 10NW 20NW A0NW AONW AONW AONW AONW AONW AONW AO	Maximum input current	25A-DC	50A-DC	100A-DC	
Sugested PV power for input 2000W-S.P. <15000W	Maximum input Isc	40A	A08	120A	
Night energy consumption OUTPUT Maximum output power Rated output voltages ### ### ### ### #### #### ##########	Number of MMPT tracker	1	1	2	
Maximum output power Rated output voltages ### Author output countries ### Author output countries ### ### Author output countries #### Author output countries ##### Author output countries ##### Author output countries ###### Author output countries ###################################	Sugested PV power for input	2000W< S.P. <15000W	2000W< S.P. <25000W	4000W< S.P. <50000W	
Maximum output power Rated output voltages Maximum output currents #16,6A #13,3A #16,6A #13,3A #16,6A #15,6A #1	Night energy consumption	51	5W		
### Add output voltages ### Add output voltages ### Add output currents ### Add output c	OUTPUT				
Maximum output currents ±16,6A ±33,3A ±66A Efficiency > 96% > 97% Poles 3 poles (Positive, negative, neutral) FRONT PANEL 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 CAN Standard CAN Standard PC software Standard MECHANICAL DATA Dimensions (H-MVXD) (3U)133x/30x/490 (3U)133x/50x/456x/815 Weight (kg) 17,5 31 Mounting system Wall Bracket/Cabinate System Cornection type Both Input and Output 800V 10mm² Terminals Both Input and Output 800V 35mm² Terminal ENVIRONMENT CONDITION Operating temperature 0°C – 50°C Altitude 1000m @ nominal power Humidity < 90% (non-condensing) COMPLIANCE Quality standard ISO9001 PROTECTIONS liput Optional 1000V-DC Lightning/surge arrester and 1000V 50-100A Fuse	Maxiumum output power	10kW	20kW	40kW	
Efficiency 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 R5232 Standard CAN Standard CAN Standard PC software MECHANICAL DATA Dimensions (H-W-C) Weight (g) 17,5 31 Mounting system Connection type Both Input and Output 800V 10mm² Terminals ENVIRONMENT CONDITION Operating temperature O°C – 50°C Storage temperature O°C – 50°C Altitude Quality standard ISO9001 PROTECTIONS Optional 1000V-DC Lightning/surge arrester and 1000V 50-100A Fuse	Rated output voltages		± 405VDC		
Poles 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) Weight (kg) 17,5 31 Mounting system Wall Bracket/Cabinate System Connection type Both Input and Output 800V 10mm² Terminals ENVIRONMENT CONDITION Operating temperature O"C – 50°C Storage temperature Altitude Humidity COMPLIANCE Quality standard ISO9001 PROTECTIONS Input Optional 1000V-DC Lightning/surge arrester and 1000V 50-100A Fuse	Maximum output currents	±16,6A	±33,3A	±66A	
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 R5232 Standard R5485 Standard CAN Standard PC software Standard MECHANICAL DATA Dimensions (HWWD) Dimensions (HWWD) Dimensions (HWWD) Dimensions (HWWD) Dimensions (HWWD) Standard Connection type Both Input and Output 800V 10mm² Terminals ENVIRONMENT CONDITION Operating temperature Storage temperature O°C – 50°C Storage temperature Altitude Altitude FUNDING POWER (HWD) FUNDING POWER (HWD) COMPLIANCE Quality standard ISO9001 PROTECTIONS Input Optional 1000V-DC Lightning/surge arrester and 1000V 50-100A Fuse	Efficiency	> 9'	> 96%		
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 (h-WxD) Dimensions (h-WxD) Dimensions (h-WxD) Dimensions (h-WxD) Dimensions (h-WxD) Dimensions (h-WxD) PC software Standard MOUNTING System Wall Bracket/Cabinate System Connection type Both Input and Output 800V 10mm² Terminals ENVIRONMENT CONDITION Operating temperature O°C – 50°C Storage temperature O°C – 50°C Altitude 1000m @ nominal power Humidity CMPLIANCE Quality standard ISO9001 PROTECTIONS Input Optional 1000V-DC Lightning/surge arrester and 1000V 50-100A Fuse	Poles		3 poles (Positive, negative, neutral)		
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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 10mm² Terminals Both Input and Output 800V 35mm² Terminal 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		current, cha			
RS485 CAN CAN Standard PC software MECHANICAL DATA Dimensions (HxWxD) Dimensions (HxWx	COMMUNICATION				
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 10mm² Terminals Both Input and Output 800V 35mm² 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 Optional 1000V-DC Lightning/surge arrester and 1000V 50-100A Fuse	RS232		Standard		
PC software MECHANICAL DATA Dimensions (HxWxD) Weight (kg) 17,5 31 Mounting system Wall Bracket/Cabinate System Connection type Both Input and Output 800V 10mm² Terminals ENVIRONMENT CONDITION Operating temperature Storage temperature O°C – 50°C Altitude Humidity COMPLIANCE Quality standard Optional 1000V-DC Lightning/surge arrester and 1000V 50-100A Fuse	RS485		Standard		
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Mounting system Connection type Both Input and Output 800V 10mm² Terminals ENVIRONMENT CONDITION Operating temperature Storage temperature O°C – 50°C Altitude Humidity COMPLIANCE Quality standard PROTECTIONS Input Optional 1000V-DC Lightning/surge arrester and 1000V 50-100A Fuse	Dimensions (HxWxD)	(3U)133x	(3U)133x430x490		
Connection type Both Input and Output 800V 10mm² Terminals Both Input and Output 800V 35mm² Terminals Operating temperature O°C – 50°C Storage temperature Altitude Altitude 1000m @ nominal power Humidity COMPLIANCE Quality standard PROTECTIONS Input Optional 1000V-DC Lightning/surge arrester and 1000V 50-100A Fuse	Weight (kg)	17	17,5		
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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	Operating temperature	0°C – 50°C			
Humidity < 90% (non-condensing) COMPLIANCE Quality standard ISO9001 PROTECTIONS Input Optional 1000V-DC Lightning/surge arrester and 1000V 50-100A Fuse	Storage temperature		0°C – 50°C		
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Quality standard PROTECTIONS Input Optional 1000V-DC Lightning/surge arrester and 1000V 50-100A Fuse	Humidity		< 90% (non-condensing)		
Quality standard PROTECTIONS Input Optional 1000V-DC Lightning/surge arrester and 1000V 50-100A Fuse	COMPLIANCE				
PROTECTIONS Input Optional 1000V-DC Lightning/surge arrester and 1000V 50-100A Fuse			ISO9001		
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