



## SolarRiver-BSS

### SolarRiver 2000TL-BSS-LV

### SolarRiver 3000 / 5000 / 10000TL-BSS

#### **SIMPLE. FLEXIBLE.**

- On-Grid Inverter with Energy Storage
- Self-consumption and Feed-in to the grid
- User-adjustable battery charging current suits different types of batteries
- Programmable supply priority for PV panel, Battery or Grid

#### **OPEN. INTERACTIVE.**

- Multiple communication via USB, RS-232, Modbus and SNMP
- Monitoring software for real time display and control
- Built-in timer for various modes of on/off operation

#### **SECURE. EFFICIENT.**

- Highest earnings through prime system efficiency
- Battery backup function for maximum supply security

MODEL	SolarRiver 2000TL-BSS-LV	SolarRiver 3000TL-BSS	SolarRiver 5000TL-BSS	
<b>PHASE</b>	1-phase in / 1-phase out		1-phase in / 1-phase out	
<b>RATED OUTPUT POWER</b>	2000 W	3000 W	5000 W	
<b>MAXIMUM CHARGING POWER</b>	1200 W	1200 W	4800 W	
<b>GRID-TIE OPERATION</b>				
<b>PV INPUT (DC)</b>				
Maximum PV Input Power	2250W	4500W	10000W	
Nominal DC Voltage / Maximum DC Voltage	300 VDC / 350 VDC	360 VDC / 500 VDC	720 VDC / 900 VDC	
Start-up Voltage / Initial Feeding Voltage	80 VDC / 120 VDC	116 VDC / 150 VDC	225 VDC / 250 VDC	
MPP Voltage Range	150 VDC ~ 320 VDC	250 VDC ~ 450 VDC	250 VDC ~ 850 VDC	
Number of MPP Trackers / Maximum Input Current	1 / 1 x 15 A	1 / 1 x 18 A	2 / 2 x 10.0A	
<b>GRID OUTPUT (AC)</b>				
Nominal Output Voltage	101/110/120/127 VAC	208/220/230/240 VAC	230 VAC	
Output Voltage Range	88 - 127 VAC*	184 - 264.5 VAC*	184 - 265 VAC*	
Nominal Output Current	18 A	13 A	21 A	
Power Factor	> 0.99		> 0.99	
<b>EFFICIENCY</b>				
Maximum Conversion Efficiency (DC/AC)	95%	96%	> 96%	
European Efficiency@ Vnominal	94%	95%	> 95%	
<b>OFF-GRID OPERATION</b>				
<b>AC INPUT</b>				
AC Start-up Voltage/Auto Restart Voltage	60 - 70 VAC / 85 VAC	120 - 140 VAC / 180 VAC	120 - 140 VAC / 180 VAC	
Acceptable Input Voltage Range	80 - 130 VAC	170 - 280 VAC	170 - 280 VAC	
Maximum AC Input Current	30 A		40A (Include Loads and Charging)	
<b>PV INPUT (DC)</b>				
Maximum DC Voltage	350 VDC	500 VDC	900 VDC	
MPP Voltage Range	150 VDC ~ 320 VDC	250 VDC ~ 450 VDC	350 VDC ~ 850 VDC	
Number of MPP Trackers / Maximum Input Current	1 / 1 x 15 A	1 / 1 x 18 A	2 / 2 x 10.0A	
<b>BATTERY MODE OUTPUT (AC)</b>				
Nominal Output Voltage	101/110/120/127 VAC	202/208/220/230/240 VAC	230 VAC	
Output Waveform	Pure Sinewave		Pure Sinewave	
Efficiency (DC to AC)	90%	93%	91%	
<b>HYBRID OPERATION</b>				
<b>PV INPUT (DC)</b>				
Nominal DC Voltage / Maximum DC Voltage	300 VDC / 350 VDC	360 VDC / 500 VDC	720 VDC / 900 VDC	
Start-up Voltage / Initial Feeding Voltage	80 VDC / 120 VDC	116 VDC / 150 VDC	320 VDC / 350 VDC	
MPP Voltage Range	150 VDC ~ 320 VDC	250 VDC ~ 450 VDC	350 VDC ~ 850 VDC	
Number of MPP Trackers / Maximum Input Current	1 / 1 x 15 A	1 / 1 x 18 A	2 / 2 x 10.0A	
<b>GRID OUTPUT (AC)</b>				
Nominal Output Voltage	101/110/120/127 VAC	202/208/220/230/240 VAC	230 VAC	
Output Voltage Range	88-127 VAC*	184 - 264.5 VAC*	184 - 265 VAC*	
Nominal Output Current	18 A	13 A	21A	
<b>AC INPUT</b>				
AC Start-up Voltage / Auto Restart Voltage	60 - 70 VAC / 85 VAC	120 - 140 VAC / 180 VAC	120 - 140 VAC / 180 VAC	
Acceptable Input Voltage Range	80 - 130 VAC	170 - 280 VAC	170 - 280 VAC	
Maximum AC Input Current	30 A		40A	
<b>BATTERY MODE OUTPUT (AC)</b>				
Nominal Output Voltage	101/110/120/127 VAC	202/208/220/230/240 VAC	230 VAC	
Efficiency (DC to AC)	90%	93%	92%	90%
<b>BATTERY &amp; CHARGER</b>				
Nominal DC Voltage	48 VDC		48 VDC	
Battery Shutdown Voltage	-		Default 42 VDC, 40-50 VDC(Adjustable)	Default 42 VDC, 40 - 54VDC(Adjustable)
Maximum Charging Current	Default 25A, 5A - 25A (Adjustable)		Default 60A, 5A - 100A (Adjustable)	Default 60A, 5A - 100A (Adjustable)
Absorption Charger Voltage	-		Default 56 VDC, 50 - 60 VDC(Adjustable)	Default 56 VDC, 50 - 64 VDC(Adjustable)
Floating Charger Voltage	-		Default 54 VDC, 50 - 60 VDC(Adjustable)	Default 54 VDC, 50 - 64 VDC(Adjustable)
Battery Overcharge Protection	-		62 VDC	66 VDC
<b>GENERAL</b>				
<b>PHYSICAL</b>				
Dimension, W x H x D (mm)	438 x 480 x 107		438 x 550 x 120	
Net Weight (kgs)	15.5		16	
<b>INTERFACE</b>				
Communication Port	RS-232/USB		RS-232/USB	
Intelligent Slot	Optional SNMP, Modbus, and AS-400 cards available		Optional SNMP, Modbus, and AS-400 cards available	
<b>ENVIRONMENT</b>				
Humidity	0 ~ 90% RH (No condensing)		0 ~ 90% RH (No condensing)	
Operating Temperature	0 to 40°C		-10 to 55°C	
Altitude	0 ~ 1000 m**		0 ~ 1000 m*	
<b>FEATURES</b>				
Warranty: 5 / 10 / 15 / 20 years	● / ○ / ○ / ○		● / ○ / ○ / ○	
Certificates and approvals	CE, VDE-AR-N 4105, VDE 0126-1-1, AS4777, AS/NZS3100, NRS-097-2-1		CE, VDE-AR-N 4105, VDE 0126-1-1	

\*These figures may vary depending on different AC voltage and country requirements. \*\*Power derating 1% every 100 m when altitude is over 1000m. Product specifications are subject to change without further notice.

MODEL	SolarRiver 10000TL-BSS
PHASE	3-phase in / 3-phase out
RATED OUTPUT POWER	10000 W
MAXIMUM CHARGING POWER	9600 W
<b>GRID-TIE OPERATION</b>	
<b>PV INPUT (DC)</b>	
Maximum PV Input Power	14850W
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC
MPP Voltage Range	350 VDC ~ 850 VDC / 400 VDC ~ 800 VDC
Number of MPP Trackers / Maximum Input Current	2 / 2 x 18.6A
<b>GRID OUTPUT (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184 - 265 VAC per phase
Nominal Output Current	14.5 A per phase
Power Factor	> 0.99
<b>EFFICIENCY</b>	
Maximum Conversion Efficiency (DC/AC)	> 96%
European Efficiency@ Vnominal	> 95%
<b>OFF-GRID OPERATION</b>	
<b>AC INPUT</b>	
AC Start-up Voltage/Auto Restart Voltage	120 - 140 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 - 280 VAC per phase
Maximum AC Input Current	40A
<b>PV INPUT (DC)</b>	
Maximum DC Voltage	900 VDC
MPP Voltage Range	350 VDC ~ 850 VDC / 400 VDC ~ 800 VDC
Number of MPP Trackers / Maximum Input Current	2 / 2 x 18.6A
<b>BATTERY MODE OUTPUT (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Waveform	Pure Sinewave
Efficiency (DC to AC)	91%
<b>HYBRID OPERATION</b>	
<b>PV INPUT (DC)</b>	
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC
MPP Voltage Range	350 VDC ~ 850 VDC / 400 VDC ~ 800 VDC
Number of MPP Trackers / Maximum Input Current	2 / 2 x 18.6A
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Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
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AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 - 280 VAC per phase
Maximum AC Input Current	40A
<b>BATTERY MODE OUTPUT (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Efficiency (DC to AC)	91%
<b>BATTERY &amp; CHARGER</b>	
Nominal DC Voltage	48 VDC
Maximum Charging Current	Default 60A, 10A - 200A (Adjustable)
<b>GENERAL</b>	
<b>PHYSICAL</b>	
Dimension, W x H x D (mm)	500 x 622 x 167.5
Net Weight (kgs)	45
<b>INTERFACE</b>	
Communication Port	RS-232/USB and CAN Interface
Intelligent Slot	Optional SNMP, Modbus, and AS-400 cards available
<b>ENVIRONMENT</b>	
Humidity	0 ~ 90% RH (No condensing)
Operating Temperature	-10 to 55°C
Altitude	0 ~ 1000 m*
<b>FEATURES</b>	
Warranty: 5 / 10 / 15 / 20 years	● / ○ / ○ / ○
Certificates and approvals	CE, VDE-AR-N 4105, VDE 0126-1-1

\*Power derating 1% every 100 m when altitude is over 1000m.  
Product specifications are subject to change without further notice.



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