

Mercury Series Single-phase String Inverters

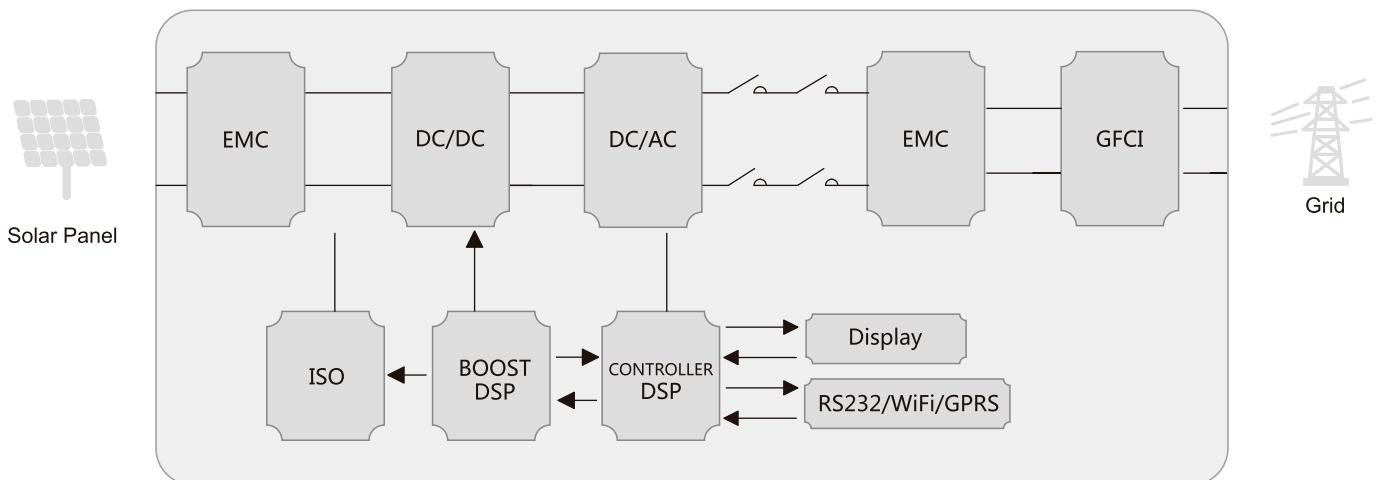
PM-1500 / 2000 / 2500 / 3000TL-SS

- ◊ Exquisite
- ◊ Trustworthy
- ◊ Intelligent
- ◊ Profitable



FEATURES	ADVANTAGES	BENEFITS
Components from world class suppliers	Longer MTBF (Mean Time Between Failures)	More electricity output Less down time
Automotive class PCB technology	Higher quality guaranteed	Reliable and stable under severe conditions
Optimized thermal design	Lower heat generation Faster heat dissipation	Lower internal operation temperature Longer component life
Silicone Rubber Gaskets & Seals	High performance sealing	Reliable and stable under severe conditions
Integrated enclosure design	High performance sealing possible Less chance of moisture invasion	Suitable for humid operation environments
Integrated air valve	Reduction of condensation	Operationable in more applications: fishing ponds, agricultural area, greenhouses, coastal areas
1000 hours of neutral salt spray testing	Suitable for harsh environments	Easy installation and maintenance possible
User friendly interface	Easy to operate	Data analysis Less maintenance
Intelligent monitoring system	Easy to manage and maintain	

CIRCUIT DIAGRAM



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TECHNICAL DATA

MODEL	PM-1500TL-SS	PM-2000TL-SS	PM-2500TL-SS	PM-3000TL-SS
Input (DC)				
Max. DC Power	1600W	2100W	2600W	3200W
Max. Input Voltage	500V	500V	500V	500V
MPP Operation Voltage Range/Nominal Input Voltage	100V-450V/380V	100V-450V/380V	100V-450V/380V	100V-450V/380V
Startup Voltage	80V	80V	80V	80V
Max. Input Current per String	11.5A	11.5A	11.5A	11.5A
Short-circuit Current	13.5A	13.5A	13.5A	13.5A
Number of Independent MPP Inputs	1	1	1	1
Max. inverter Backfeed Current to Array	0A	0A	0A	0A
Output (AC)				
Rated Power	1500W	2000W	2500W	3000W
Max. Apparent AC Power	1500VA	2000VA	2500VA	3000VA
Nominal AC Voltage	220V/230V/240V	220V/230V/240V	220V/230V/240V	220V/230V/240V
Nominal AC Voltage Range	180V-277V	180V-277V	180V-277V	180V-277V
AC Power Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Max. Output Current	6.8A	9.1A	11.4A	13.6A
Power Factor	0.8 ind...0.8 cap	0.8 ind...0.8 cap	0.8 ind...0.8 cap	0.8 ind...0.8 cap
Total Harmonic Distortion (THD)	<3%	<3%	<3%	<3%
Feed-in Phases/Connection Phases	L+N+PE	L+N+PE	L+N+PE	L+N+PE
Inrush Current(peak and duration)	49.6A peak@6.72ms	51.2A peak@6.51ms	52.0A peak@6.84ms	59.2A peak@6.88ms
Max. Output Fault Current	7.8A	10.1A	12.4A	14.6A
Max. Output Over Current Protection	8.8A	11.8A	14.8A	17.7A
Efficiency				
Max. Efficiency	96.8%	97.1%	97.2%	97.2%
European Weighted Efficiency	96.0%	96.2%	96.4%	96.4%
Protective Devices				
DC Reverse Polarity Protection		Yes		
DC Switch		Optional		
AC Over Current Protection		Yes		
Ground Fault Monitoring		Yes		
Grid Monitoring		Yes		
Residual Current Monitoring Unit		Yes		
General Data				
Dimensions (W / H / D)		326*349*135mm		
Weight		10.5 kg		
Operating Temperature Range		-25°C...+60°C		
Noise Emission (typical)		<=25dB(A)		
Max. Operating Altitude		>2000m derating		
Standby Losses		<0.5W		
Topology		Transformerless		
Cooling Concept		Natural Convection		
Degree of Protection (according to IEC 60529)		IP 65		
Relative Humidity		0-95%, no condensation		
DC Connection Type		MC/Amphenol/Phoenix		
AC Connection Type		Plug-in connector		
Display		LCD Light		
Interface		RS 232 (WiFi/GPRS Optional)		
Warranty		5/10 years(Optional)		
Certificates and approvals		IEC62109-1/-2, EN61000-6-2, EN61000-6-3, CE, AS4777.2-2015, VDE4105, EN50438, CQC		

*The AC voltage and frequency range may vary due to local regulations.