A partner you can trust.

Bankability. Reliability. Serviceability.

TMEIC, a multi-billion $ joint venture between Toshiba & Mitsubishi-Electric, is a global leader for PV inverter technology innovation.

Bankability

The financial strength you need in an inverter partner. TMEIC is a diversified industrial systems company, serving steel, oil & gas, mining, container crane and a wide variety of power electronics applications.

- #1 market share leader in the Japanese market and #1 worldwide for inverters >99kW
- More than 9,000 MW of PV Inverters installed world-wide
- Over 30 years of PV inverter manufacturing and R&D experience

Reliability

A level above the competition. TMEIC was the first company to implement advanced 3-level NPS topology and an advanced hybrid cooling system for PV central inverters.

- First central inverter to achieve 99% maximum efficiency
- Heatpipe-based cooling minimizes particle entrance, increasing uptime & reducing O&M cost
- With over 9,000 MW installed, TMEIC has only had two IGBT field failures.

Serviceability

We're there when you need us! TMEIC's well proven technology is further enhanced with the industry's leading service structure.

- 24/7 US based phone support
- Comprehensive customer training system
- Extended warranty of up to 20 years
- Optional performance guarantee

Global Locations

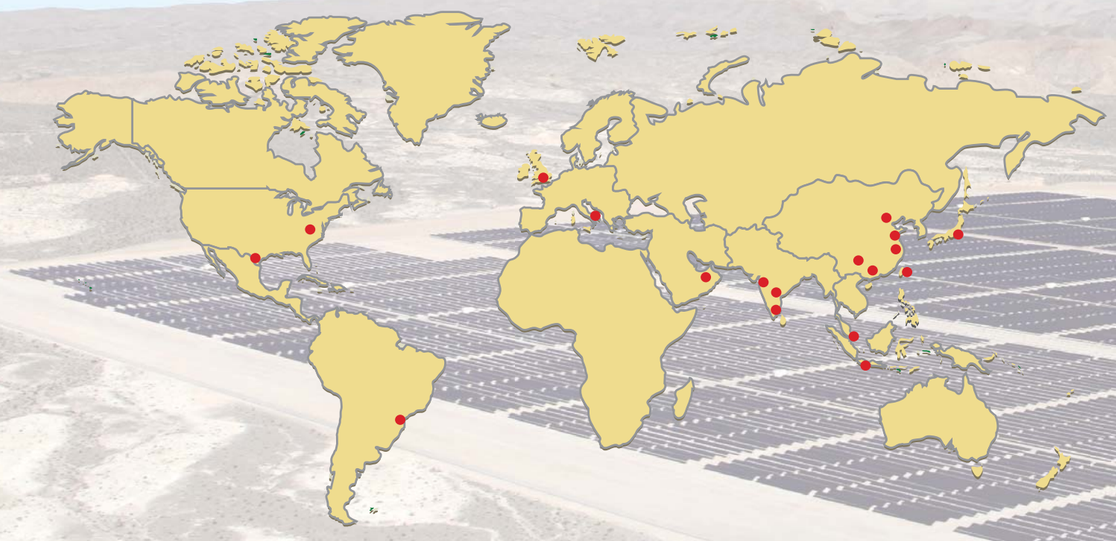

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Photo courtesy of Signal Energy

TMEIC

P-1307-T
Revised July 2016

TMEIC
We drive industry

SOLAR WARE® Samurai Series

Up to 2700kW, 1500V

The world's first 1500VDC PV inverter certified to UL1741

SOLAR WARE® SAMURAI

Three Power Classes

- 2700 kW – 2700 kVA (1500 V)
- 2500 kW – 2500 kVA (1500 V)
- 1833 kW – 2000 kVA (1000 V)

1500Vdc Series

- UL 1741 Certified
- Reduces cable mass to minimize cost & enhance flexible plant design
- Reduces combiner box and number of inverters

Award Winning Central Inverters for the Solar Industry

- Advanced multilevel inverter - 56% of switching loss reduction
- Maximized and optimized efficiency at high load
- Wide MPPT range allowing for best in class DC/AC Ratios
- Flexible DC-input configuration to meet complex array configuration

Maximize Revenue & Improve ROI

- High-yield power generation – Maximum efficiency of 99%
- High-efficiency in any weather
- Realize large capacity with fewer inverters
- Reduce site work and BOS investment

Grid Connection Features

TMEIC developed the grid connection features working with Japanese power companies. All of TMEIC's utility scale inverters include the latest interconnection technology. These features include:

- Power factor control
- Reactive/Active power control
- TMEIC's proprietary anti-islanding technique utilizes a slip mode frequency shift method
- Advanced Fault Ride Through Features

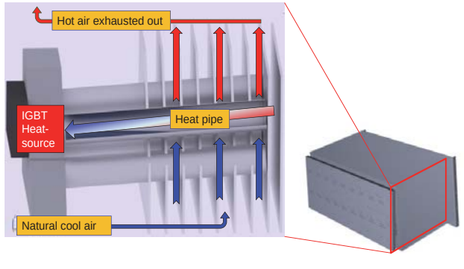
Advanced Hybrid Cooling System

The first heat pipe air-cooled PV inverter

Utilizing TMEIC heat pipe technology, the inverter runs without fan operation up to 50% load. Heat-pipe cooling significantly simplifies thermal management, because it uses fewer parts and only a slow-speed fan with a heat pipe heat sink. TMEIC's advanced hybrid cooling solution:

- Simple & Robust
- High Reliability
- Significantly reduces O&M costs
- Small Footprint

The Fan-less mode runs when the inverter is below 50% load @ 50°C. Natural convection provides necessary cooling. Cool air enters from the bottom, flows through the heat pipe, and hot air is exhausted from the top.



SPECIFICATIONS

Type		PVL-L0833GR	PVL-L1833GRQ	PVL-L1833GRM	PVH-L2500GR	PVH-L2700GR
Output side (AC)	Rated Power	833 kW	1667 kW	1833 kW/2000 kVA	2500 kW/2500 kVA	2700 kW/2700 kVA
	Rated Voltage (3-phase)	418V +10%, -12%	418V +10%, -12%	418V +10%*1	550V +10%*1	600V +10%*1
	Rated Frequency	60/50 Hz (+0.5 Hz, -0.7 Hz)	60/50 Hz (+0.5 Hz, -0.7 Hz)	60/50 Hz (+0.5 Hz, -0.7 Hz)	60/50 Hz	60/50 Hz
	Rated Power Factor	Over 0.99	Over 0.99	Over 0.99	Over 0.99	Over 0.99
	Reactive Capability	+/-762kVAR	+/-762kVAR	+/-800kVAR	+/-890kVAR *4	+/-1020kVAR*4
	Rated Current	1265 Arms	2533 Arms	2762 Arms	2624 Arms	2598 Arms
	Maximum Current	1438 Arms	2877 Arms	2762 Arms	2624 Arms	2598 Arms
	Maximum Eff.	99%	99%	99%	98.8%	98.8%
	CEC Efficiency	98.5%	98.5%	98.5%	98.5%	98.5%
	Maximum Voltage	1000 Vdc	1000 Vdc	1000 Vdc	1500 Vdc	1500 Vdc
	MPPT Operation Range	605 Vdc ~ 950 Vdc*2	605 Vdc ~ 950 Vdc*2	605 Vdc ~ 950 Vdc	800 Vdc ~ 1300 Vdc	875 Vdc ~ 1300 Vdc
Environ. Conditions	Ingress Protection Ratings	NEMA3R	NEMA3R	NEMA3R	NEMA3R	NEMA3R
	Installation	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor
	Amb. Temp. Range	-20°~55°C (-4°~131°F) Derate from 50°-55° C*3			-20°~55°C (-4°~131°F) Derate from 40°-55°C*3	
	Max. Altitude	2000 m (contact TMEIC for ratings above 2000 m)				
Protective Functions	Input (DC) Side	Ground Fault, DC Reverse Current, Over Voltage, Over Current				
	Grid (AC) Side	Anti-islanding, Over/Under Voltage, Over/Under Frequency, Over Current				
	Grid Assistance	Reactive/Active Power Control, Power Factor Control, Fault Ride Through (optional)				
User Interface	User Interface	LCD (3.8 inch, QVGA) with Touch-Screen				
	Communication	Modbus/TCP				
Fault Analysis		Fault Event Log, Waveform Acquisition via memory card				
Compliance		UL1741/CSA; 107.1/IEEE1547; NEC standard				
Cooling Method		Advanced Hybrid Cooling				
Standard Number of Inputs		1	1	1	1	1
Standard Control Power Supply		Control Power Supply from Inverter output and Capacitor backup circuit (3 sec. compensation)				
Weight		7940 lbs (3600kg)	11,500 lbs (5200 kg)	11,500 lbs (5200 kg)	13,228 lbs (6000 kg)	13,228 lbs (6000 kg)
Dimensions (H x W x D)		92 x 118 x 46 inch (2286 x 3000 x 1150 mm)	92 x 197 x 46 inch (2286 x 5000 x 1150 mm)	92 x 197 x 46 inch (2286 x 5000 x 1150 mm)	92 x 197 x 46 inch (2286 x 5000 x 1150 mm)	92 x 197 x 46 inch (2286 x 5000 x 1150 mm)
Floor Space		5,348 sq. in. (3.45m²)	8,914 sq. in. (5.75 m²)	8,914 sq. in. (5.75 m²)	8,914 sq. in. (5.75 m²)	8,914 sq. in. (5.75 m²)
Color		Cabinet: Sand White #Dic583, Roof: Gray #Munsel N4.5				

Notes:

*1 Full power available at and above nominal voltage. Derate will apply below nominal voltage.

*2 Transition from constant DC voltage mode to MPPT mode occurs between 595V and 605V.

*3 Contact a TMEIC Sales Manager for detailed temperature-related derates.

*4 Available reactive capability with reduction in active power.