

# China Photovoltaic Inverter Industry Report, 2009-2010

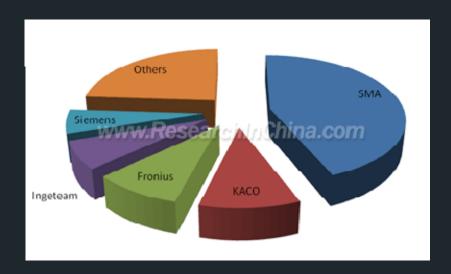


Inverter functions to convert direct current (DC) into alternating current (AC), which turns out to be a 'reverse' rectification process. Photovoltaic (PV) inverter is the core device of photovoltaic system. The performance improvement of inverter plays a crucial role in promoting the efficiency & reliability and service life of the system as well as reducing cost.

Globally, SMA, KACO, Fronius, Ingeteam, Siemens, Studer, Xantrex, Danfoss, Conergy, Satcon, Power-one, Outback power, etc. nearly monopolize the world"s market shares, of which, the former five enjoy a market share exceeding 70%. In 2009, SMA ranked first with a global share of 44%.



#### Market Share of PV Inverter Manufacturers Worldwide, 2009



Source: ResearchInChina

As a whole, there is a certain gap between Chinese PV inverter manufacturers and most advanced foreign counterparts in respect of conversion efficiency, structure & process technique, workmanship, and stability, while the technical level of low power keeps roughly the same as that in overseas countries. Sungrow Power Supply Co., Ltd. is the largest supplier of new energy power in China with the products covering wind power, photovoltaic, and electrical source of power system, which have been successfully applied in numerous large-scale demonstration projects in China. Its shipment of PV inverter in 2009 approximated 80MW.



#### **Suppliers of PV Inverter in China**

Company	Time of	Product Features/Positioning	Other
	Market		
	Access		
Sungrow Power	1997	Wind power, photovoltaic, grid	Domestic No.1 supplier of new energy
Supply Co., Ltd.		connection of power system, off-grid	power; its products have been triumphantly
		single machine with maximum power	used in numerous large-scale demonstration
		of 1MW	projects in China
Nanjing First	2001	Wind power, photovoltaic, grid	Relatively powerful creative ability of
Second Power		connection of power system, off-grid	products; occupy relatively large share in
Equipment Co.,		single machine with maximum power	telecommunication base station market
Ltd.		of 1MW	
Beijing Corona	2001	Wind power, photovoltaic grid	Over 30 years' scientific research
Science &		connection and off-grid	accumulation by Institute of Electrical
Technology Co.,			Engineering, Chinese Academy of Sciences,
Ltd.			the company is meanwhile positioned as
			system integrator
Anhui EHE New	2007	Photovoltaic, grid connection of	Establish IAR (Industry-Academy-Research)
Energy Tech.		high-voltage frequency converter,	cooperation with the Photovoltaic Systems
Co., Ltd.		off-grid single machine with maximum	Engineering Research Center (approved by
		power of 1MW	Ministry of Education of the People's
			Republic of China) of Hefei University of
			Technology
Guangdong	2007	UPS, photovoltaic, grid-connected and	Establish IAR cooperation with Huazhong
Zhicheng		off-grid storage battery	University of Science and Technology and
Champion Group			Wuhan University with the R&D orientation
Co., Ltd.			of modularization connection; and with
			relatively strong ability of R&D
Other	2007-2009	The recent entrants: Jiangsu Eversolar,	Jiangsu Jinghen, Jiangsu Nicetown, Shandong
		BOS, Shanghai Aero-Sharp, Shanghai Surpass Sun Electric, Beijing Kunlun, etc.	

Source: ResearchInChina



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