

# Solar inverter

## Solar inverter KS-Series 1500 – 5000W

Grid-connected ,  
1.500, 2.000, 3.000, 3.600, 4.200 and 5.000Watt,

**NEU / NEW**

The KS series solar inverters with an output of 1,500 to 5,000 watts are suitable for private use. They are characterized by high efficiency, reliability, compact design easy installation.



Above: DT model  
(2 MPPT trackers - available with 3000-5000 watts)

### Properties

#### High efficiency

- Euro efficiency up to 96.8%
- High MPPT accuracy
- Fast MPPT calculation method
- Extreme low power loss at night
- Very high conversion efficiency DC-DC through soft-switch technology.

#### High reliability

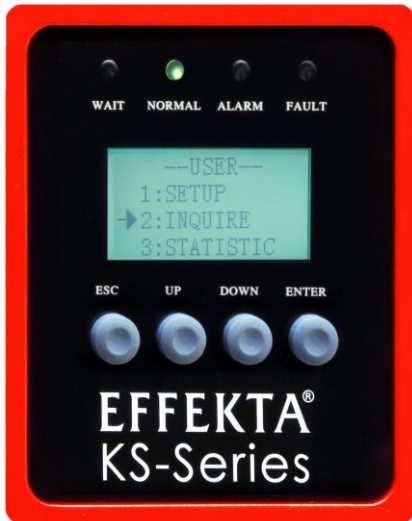
- Perfect cooling concept
- No derating up to 50°C during operation
- Comprehensive electronic protection such as over-current protection and internal inverter protection
- Monitoring of insulation resistance and leakage current
- Transformerless, no galvanic isolation

#### User-friendly maintenance / commissioning

- Easy to install
- DC cable connection without special tools
- LCD panel with all operating status and monitoring data
- RS232/RS485 communication (optional WLAN)
- DC switch (optional) can be integrated into the housing



Above: ST-Modell  
(1 MPPT tracker - available with 1500-3600 watts)



Above: Bottom of the DT models (2 MPPT trackers) with DC connector panel, AC output, communication ports, and optional integrated DC disconnect switch (view without cooling fins)

Left: Control panel of the DT models (2 MPPT trackers)

# Specification

Model		KS 1500ST	KS 2000ST	KS 3000ST	KS 3600ST	KS 3000DT	KS 3600DT	KS 4200DT	KS 5000DT
Input (DC)	Nominal DC power[Wp]	1650	2200	3100	3900	3100	3900	4300	5100
	Max. DC power ( $\pm 10\sim 20\%$ ) [Wp]	1800	2400	3300	4000	3300	4000	4600	5500
	Max. DC voltage[V]	500VDC				600VDC			
	Max. input current[A]	11	13	19	22	2 x 12	2 x 14	2 x 16	2 x 17
	Number of MPP tracker / Strings per MPP tracker	1 / 1	1 / 2			2 / 2			
	MPPT voltage range (@ nom.power)	150-450VDC*				150-500VDC*			
Output (AC)	Max. DC power per MPP tracker	1800W	2400W	3300W	4000W	1800W	2200W	2500W	3000W
	Nominal AC power [W]	1500	2000	3000	3600	3000	3600	4200	5.0/4.6K**
	Max. AC power [W]	1650	2200	3100	3700	3100	3700	4300	5.1/4.6K**
	Max. output current[A]	9	11	15	18	15	18	21	24
	Rated output current (rms) [A]	6.5	8.7	13	15.6	13	15.6	18.3	21.7
	Wire / Nominal AC voltage	1 / N / PE, 230VAC							
	AC voltage window	184V-264V							
	AC grid frequency / range [Hz]	50 / 60Hz $\pm 5$ Hz							
	Power factor (cos $\phi$ ), adjustable	1				0.9 leading- 0.9 lagging			
	Total harmonic distortion (THDi)	<3%							
	Efficiency	Max. efficiency	> 96.0%				> 97.5%		
Euro-efficiency		> 95.0%				> 96.5%			
MPPT efficiency		> 99.9%							
General data	Dimensions (W / H / D) [mm]	335 x 580 x 180				400 x 637 x 190			
	Weight [kg]	15.8	18.2			22			
	Operating temperature range [°C]	-20°C ~ +40°C							
	Ingress protection	IP65 (not intended for outdoor use)							
	Topology	transformer-less							
	Internal DC consumption (stand-by / night)	< 5 W / < 0.2 W				< 12 W / < 0.2 W			
	Cooling concept	convection cooling							
	Noise (typical) [dB]	< 25dB							
	LCD display	Yes							
	Communication port	RS485 standard; RS232, external WIFI o. Ethernet (option)							
	Standard warranty [year]	5							
Protection	DC switch	Option (can be integrated into the housing)							
	DC reverse-polarity protection	Yes							
	All-pole fault current monitoring	Yes							
	AC short-circuit protection	Yes							
Regulations / standards	Safety	EN 62109-1, EN 62109-2, VDE V 0126-1-1, VDE V 0124-100, VDE AR N 4105				EN 62109-1, EN 62109-2, VDE V 0126-1-1, VDE V 0124-100, VDE AR N 4105			
	EMC	EN 61000-6-2, EN 61000-6-3				EN 61000-6-2, EN 61000-6-3			
	Certifications	CE							

\* Note: Exceeding or outside of MPPT voltage range: Error message, no power feeding

\*\* Note: According to VDE-AR-N-4105