



INVERTER OVERVIEW

	3K-S22002	3.68K-S22002	4.6K-S22002	5K-S22002	6K-S22002	CSI-25K-T400GL02-E	CSI-30K-T400GL02-E	CSI-33K-T400GL02-E	CSI-36K-T400GL02-E	CSI-40K-T400GL02-E	CSI-50K-T400GL03-E	CSI-60K-T400GL03-E	CSI-100K-T400GL02-E	CSI-110K-T400GL02-E	
DC INPUT															
Max. PV Power						33 kW	39 kW	43 kW	47 kW	52 kW	55 kW	66 kW	140 kW	140 kW	
Max. DC Input Voltage	600	600	600	600	600	1,100 V _{DC}	1,100 V _{DC}								
MPPT Voltage Range	60-500 V _{DC}	100-550 V _{DC}	100-550 V _{DC}	100-550 V _{DC}	100-550 V _{DC}	200-1,000 V _{DC}	200-1,000 V _{DC}	200-1,000 V _{DC}	200-1,000 V _{DC}	200-1,000 V _{DC}	200-1,000 V _{DC}	180-1,000 V _{DC}	180-1,000 V _{DC}	180-1,000 V _{DC}	
Start-up DC Input Voltage / Power	60 V _{DC}	110 V _{DC}	110 V _{DC}	110 V _{DC}	110 V _{DC}	180 V _{DC}	180 V _{DC}	180 V _{DC}	180 V _{DC}	195 V _{DC}					
Number of MPP Trackers	1	2	2	2	2	3	3	3	4	4	5	6	10	10	
Max. Input Current (Imp)	12 A	24 A (12 A per MPPT)	24 A (12 A per MPPT)	24 A (12 A per MPPT)	24 A (12 A per MPPT)	78 A (26 A per MPPT)	78 A (26 A per MPPT)	104 A (26 A per MPPT)	104 A (26 A per MPPT)	160 A (32 A per MPPT)	192 A (32 A per MPPT)	260 A (26 A per MPPT)	260 A (26 A per MPPT)	260 A (26 A per MPPT)	
Max. Short Circuit Current (isc)	15 A	30 A (15 A per MPPT)	30 A (15 A per MPPT)	30 A (15 A per MPPT)	30 A (15 A per MPPT)	120 A (40 A per MPPT)	120 A (40 A per MPPT)	160 A (40 A per MPPT)	160 A (40 A per MPPT)	250 A (50 A per MPPT)	300 A (50 A per MPPT)	400 A (40 A per MPPT)	400 A (40 A per MPPT)	400 A (40 A per MPPT)	
Number of DC Inputs	1	2 (1 per MPPT)	2 (1 per MPPT)	2 (1 per MPPT)	2 (1 per MPPT)	6 (2 per MPPT)	6 (2 per MPPT)	8 (2 per MPPT)	8 (2 per MPPT)	10 (2 per MPPT)	12 (2 per MPPT)	20 (2 per MPPT)	20 (2 per MPPT)	20 (2 per MPPT)	
DC Disconnection Type	integrated DC switch	integrated DC switch	Integrated DC switch	integrated DC switch	Integrated DC switch	Integrated DC switch	Integrated DC switch	Integrated DC switch	Integrated DC switch	Integrated DC switch	Integrated DC switch	Integrated DC switch	Integrated DC switch	Integrated DC switch	
AC OUTPUT															
Rated AC Output Power	3 kW	3.68 kW	4.6 kW	5 kW	6 kW	25 kW	30 kW	33 kW	40 kW	50 kW	60 kW	100 kW	110 kW	110 kW	
Max. AC Output Power	3 kW	3.68 kW	4.6 kW	5 kW	6 kW	27.5 kW	33 kW	36.3 kW	39.6 kW	44 kW	55 kW	66 kW	110 kW	121 kW	
Rated Output Voltage	230 V _{AC}	230 V _{AC}	230 V _{AC}	230 V _{AC}	230 V _{AC}	230/400 V _{AC}	230/400 V _{AC}	230/400 V _{AC}	230/400 V _{AC}	230/400 V _{AC}	230/400 V _{AC}	230/400 V _{AC}	230/400 V _{AC}	230/400 V _{AC}	
Grid Connection Type	L/N/PE	L/N/PE	L/N/PE	L/N/PE	L/N/PE	3 W / N / PE	3 W / N / PE								
Rated Grid Output Current						36 A	43.3 A	47.6 A	51.9 A	57.7 A	75 A	91.2 A	152 A	167.1 A	
Max. Output Current	13.6 A	16 A	20.9 A	21.7 A	20.9 A	41.8 A	50.2 A	55.1 A	60.2 A	66.9 A	83.6 A	100.3 A	167.1 A	183.8 A	
Rated Output Frequency	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	
Output Frequency Range	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	50 (±5)Hz	47.52 Hz / 57.62 Hz	47.55 Hz / 54.65 Hz	47.55 Hz / 54.65 Hz	47.52 Hz / 57.62 Hz	47.52 Hz / 57.62 Hz					
Power Factor	0.8 leading to 0.8 lagging	0.8 leading to 0.8 lagging	> 0.99 (0.8 leading ... 0.8 lagging)	> 0.99 (0.8 leading ... 0.8 lagging)											
Current THD	< 3 %	< 3 %	< 3 %	< 3 %	< 3 %	< 3 %	< 3 %	< 3 %	< 3 %	< 3 %	< 3 %	< 3 %	< 3 %	< 3 %	
SYSTEM															
Topology	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless	
Max. Efficiency	97.8 %	97.5 %	98.0 %	98.0 %	98.8 %	98.8 %	98.8 %	98.8 %	98.8 %	98.7 %	98.7 %	98.7 %	98.7 %	98.7 %	
EU Efficiency	97.1 %	96.8 %	97.5 %	97.5 %	98.3 %	98.3 %	98.3 %	98.3 %	98.3 %	98.3 %	98.3 %	98.3 %	98.3 %	98.3 %	
Night Consumption	< 1 W	< 1 W	< 1 W	< 1 W	< 1 W	< 1 W	< 1 W	< 1 W	< 1 W	< 1 W	< 1 W	< 2 W	< 2 W	< 2 W	
ENVIRONMENT															
DC/AC SPD	DC SPD Type II / AC SPD Type III	DC SPD Type II / AC SPD Type III	DC SPD Type II / AC SPD Type III	DC SPD Type II / AC SPD Type III	DC SPD Type II / AC SPD Type II	DC SPD Type II / AC SPD Type II	DC SPD Type II / AC SPD Type II	DC SPD Type II / AC SPD Type II	DC SPD Type II / AC SPD Type II	DC SPD Type II / AC SPD Type II	DC SPD Type II / AC SPD Type II	DC SPD Type II / AC SPD Type II	DC SPD Type II / AC SPD Type II	DC SPD Type II / AC SPD Type II	
Protection Degree	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP66	IP66	IP66	
Cooling	Natural Convection	Natural Convection	Natural Convection	Natural Convection	Natural Convection	Natural Convection	Natural Convection	Natural Convection	Natural Convection	Natural Convection	intelligent redundant cooling	intelligent redundant cooling	intelligent redundant cooling	intelligent redundant cooling	
Operating Temperature Range	-25 °C to +60 °C	-25 °C to +60 °C	-25 °C to +60 °C	-25 °C to +60 °C	-25 °C to +60 °C	-25 °C to +60 °C	-25 °C to +60 °C	-25 °C to +60 °C	-25 °C to +60 °C	-25 °C to +60 °C	-25 °C to +60 °C				
Storage Temperature Range						-40 °C to +70 °C	-40 °C to +70 °C								
Operating Humidity	0 - 100%	0 - 100%	0 - 100%	0 - 100%	0 - 100%	0 - 100%	0 - 100%	0 - 100%	0 - 100%	0 - 100%	0 - 100%	0 - 100%	0 - 100%	0 - 100%	
Operating Altitude	4,000 m	4,000 m	4,000 m	4,000 m	4,000 m	4,000 m	4,000 m	4,000 m	4,000 m	4,000 m	4,000 m	4,000 m	4,000 m	4,000 m	
Audible Noise	< 25 dBA	< 25 dBA	< 25 dBA	< 25 dBA	< 25 dBA	< 30 dBA @ 1 m	< 55 dBA @ 1 m	< 55 dBA @ 1 m	< 65 dBA @ 1 m	< 65 dBA @ 1 m	< 65 dBA @ 1 m				
DISPLAY & COMMUNICATION															
Display	LED Indicator	LED Indicator	LED Indicator	LED Indicator	LED Indicator	LCD, 2 x 20 Z	LCD, 2 x 20 Z								
Communication	WIFI / RS485	WIFI / RS485	WIFI / RS485	WIFI / RS485	WIFI / RS485	RS485/ WIFI Optional	RS485/ WIFI Optional	RS485/ WIFI Optional	RS485/ WIFI Optional	RS485/USB, Optional: Wi-Fi, GPRS, PLC	RS485/USB, Optional: Wi-Fi, GPRS, PLC	RS485/USB, Optional: Wi-Fi, GPRS, PLC	RS485/ WIFI Optional	RS485/ WIFI Optional	
MECHANICAL DATA															
Dimensions (W / H / D)	308 x 357 x 136 mm	355 x 435 x 158 mm	355 x mm 435 x 158	355 x 435 x 158 mm	355 x 435 x 158 mm	647 x 629 x 252 mm	647 x 629 x 252 mm	647 x 629 x 252 mm	647 x 629 x 252 mm	647 x 629 x 252 mm	691 x 578 x 338 mm	691 x 578 x 338 mm	1065 x 567 x 344.5 mm	1065 x 567 x 344.5 mm	
Weight	8.2 kg	13.5 kg	13.5 kg	13.5 kg	13.5 kg	39.3 kg	39.3 kg	45.4 kg	45.4 kg	54.5 kg	54.5 kg	84 kg	84 kg	84 kg	
Installation Angle	0 ~ 15 degrees from vertical					0 ~ 15 degrees from vertical	0 ~ 15 degrees from vertical								
DC Inputs	MC4	MC4	MC4	MC4	MC4	MC4	MC4	MC4	MC4	MC4	MC4	MC4	MC4	MC4	
CERTIFICATES															
Standard	IEC 62109-1/2, IEC 61000-6-1/3, CE, RoHS, REACH	IEC 62109-1/2, IEC 61000-6-1/3, CE, RoHS, REACH	Coming Soon	IEC 62109-1/2, IEC 61000-6-1/3/4, CE, RoHS, REACH	Coming Soon	IEC 62109-1/2, IEC 61000-6-1/3/4, CE, RoHS, REACH	IEC 62109-1/2, IEC 61000-6-1/3/4, CE, RoHS, REACH								
Grid Standard	IEC 62116, IEC 61727, EN 50549-1	EN 50549-1	Coming Soon	IEC 62116, IEC 61727, EN 50549-1	Coming Soon	IEC 62116, IEC 61727, EN 50549-1, VDE-AR-N 4105, UTE C15-712-1, VDE V0126-1-1	IEC 62116, IEC 61727, EN 50549-1, VDE-AR-N 4105, UTE C15-712-1, VDE V0126-1-1	IEC 62116, IEC 61727, EN 50549-1, VDE-AR-N 4105, UTE C15-712-1, VDE V0126-1-1	IEC 62116, IEC 61727, EN 50549-1, VDE-AR-N 4105, UTE C15-712-1, VDE V0126-1-1	IEC 62116, IEC 61727, EN 50549-1, VDE-AR-N 4105, UTE C15-712-1, VDE V0126-1-1	IEC 62116, IEC 61727, EN 50549-1, VDE-AR-N 4105, UTE C15-712-1, VDE V0126-1-1	IEC 62116, IEC 61727, EN 50549-1, VDE-AR-N 4105, UTE C15-712-1, VDE V0126-1-1	IEC 62116, IEC 61727, EN 50549-1, VDE-AR-N 4105, UTE C15-712-1, VDE V0126-1-1	IEC 62116, IEC 61727, EN 50549-1, VDE-AR-N 4105, UTE C15-712-1, VDE V0126-1-1	IEC 62116, IEC 61727, EN 50549-1, VDE-AR-N 4105, UTE C15-712-1, VDE V0126-1-1
Countries	• Netherlands - LV • Poland - LV • Poland - LV*	• Netherlands - LV • Poland - LV*	Coming Soon	• Netherlands - LV • Poland - LV • Germany - LV • France - LV • Bulgaria - LV	Coming Soon	• Netherlands - LV • Poland - LV • Germany - LV • France - LV • Bulgaria - LV	• Netherlands - LV • Poland - LV • Germany - LV • France - LV • Bulgaria - LV	• Netherlands - LV • Poland - LV • Germany - LV • France - LV • Bulgaria - LV	• Netherlands - LV • Poland - LV • Germany - LV • France - LV • Bulgaria - LV	• Netherlands - LV • Poland - LV • Germany - LV • France - LV • Bulgaria - LV	• Netherlands - LV • Poland - LV • Germany - LV • France - LV • Bulgaria - LV	• Netherlands - LV • Poland - LV • Germany - LV • France - LV • Bulgaria - LV	• Netherlands - LV • Poland - LV • Germany - LV • France - LV • Bulgaria - LV	• Netherlands - LV • Poland - LV • France - LV • Bulgaria - LV	
SMART GRID FEATURES															
	• active power derating • reactive power control • over frequency derating	• active power derating • reactive power control • over frequency derating	• active power derating • reactive power control • over frequency derating	• active power derating • reactive power control • over frequency derating	• active power derating • reactive power control • over frequency derating	• active power derating • reactive power control • over frequency derating	• active power derating • reactive power control • over frequency derating	• active power derating • reactive power control • over frequency derating	• active power derating • reactive power control • over frequency derating	• active power derating • reactive power control • over frequency derating	• active power derating • reactive power control • over frequency derating	• active power derating • reactive power control • over frequency derating	• active power derating • reactive power control • over frequency derating	• active power derating • reactive power control • over frequency derating	
WARRANTY															
	10 years (extendable)	10 years (extendable)	10 years (extendable)	10 years (extendable)	10 years (extendable)	10 years (extendable)	10 years (extendable)	10 years (extendable)	10 years (extendable)	10 years (extendable)	10 years (extendable)	10 years (extendable)	10 years (extendable)	10 years (extendable)	

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