



TBEA

TS3/4/5/6/8/10KTL-A20 Three Phase On-grid Inverter

High Power Generation

- Capability of support 150% oversizing
- 11 times output overload for higher yield

Safe and Reliable

- IP66 protection & C5 anti-corrosion
- Type II DC&AC Surge protection
- Optional AFCI

Intelligent O&M

- Remote one-click firmware upgrade
- Intelligent remote monitoring and diagnosis, improving O&M efficiency

Technical Datasheet

Model	TS3KTL-A20	TS4KTL-A20	TS5KTL-A20	TS6KTL-A20	TS8KTL-A20	TS10KTL-A20
Input (PV)						
Max. input voltage	1100V					
Rated input voltage	630V					
MPP voltage range	150V - 1000V					
Start-up voltage	125V					
Max. input current for each MPPT	16A / 16A		20A / 16A		20A / 16A	
Max. short circuit current for each MPPT	25A / 25A		30A / 25A		30A / 25A	
No. of MPPT trackers	2					
Max. input No. of per MPPT	1					
Output (AC)						
Rated output power	3kW	4kW	5kW	6kW	8kW	10kW
Max. apparent power	3.3kVA	4.4kVA	5.5kVA	6.6kVA	8.8kVA	11kVA
Rated AC voltage	220V / 380V 230V / 400V 240V / 415V					
Voltage range	160V - 300V / 320V - 520V					
Rated AC grid frequency	50Hz / 60Hz					
Grid frequency range	45Hz - 55Hz / 55Hz - 65Hz					
Max. output current	4.8A	6.4A	8.0A	9.6A	12.8A	16.0A
Adjustable power factor	0.8 leading - 0.8 lagging					
THD @Rated output	<3%					
Efficiency						
Max. efficiency	98.3%					
European efficiency	97.9%					
Protection						
DC switch	Yes					
Insulation resistance detection	Yes					
DC reverse polarity protection	Yes					
AC over-current protection	Yes					
Surge protection	DC&AC Type II					
Anti-islanding protection	Yes					
Residual current monitoring	Yes					
AFCI function	Optional					
General Data						
Dimensions (W / H / D)	503*438*183mm					
Weight	14kg					
Operating ambient temperature range	-25°C - +40°C					
Relative operating humidity (non-condensing)	0%RH - 100%RH					
Degree of protection	IP66					
Cooling method	Natural Convection					
Max. operating altitude	3000m					
Night power consumption	<1W					
Topology	Transformerless					
Display	LED Indicators					
Communication interface	RS485 or WiFi or 4G or LAN (Optional)					
DC connection type	MC4					
AC connection type	Waterproof Connector (OT/DT Terminal)					
AC cable specification	Outside diameter 10mm - 16mm					
Grid connection standard	EN 5049-1, EC 6172, EC 6163, EC 60068, VDE V 0124-100, VDE 4105, UNE 20700, UNE 20702, TED 749, RD 640, CB 0-21, Compliance with IGSwea, Poland, Netherlands					
Safety standard	IEC/EN 62109-1/-2, IEC 62116					
EMC standard	IEC/EN 61000-6-1/-2/-3/-4, EN 62920, IEC 61000-3-11/12					