



TNK PV single-phase hybrid inverters provide energy security and independence for your home when coupled with the TNK LV10 battery. Their ability to accept 160% oversizing of your PV array gives you greater flexibility in system design, allowing you to charge the battery whilst still supplying power to your home.

TNK PV5 and PV6 are built to the high standards for which Clenergy is known, giving you peace of mind that your energy needs will be taken care of for years to come. With a 10-year warranty and full local support in Australia, you can be confident in your investment.

Simplified Installation Process

- Market-tested mounting system for easy installation
- MC4 connectors with reverse-polarity protection
- Efficient commissioning process via the smartphone app

User-friendly Monitoring System

- Wi-Fi connectivity included
- Live system monitoring via the smartphone app
- Consumption meter included

Durable & Reliable

- IP66 rating, suitable for indoor and outdoor installation
- 10-year product warranty
- Integrated blackout protection with built-in EPS

Real-time Control

Smartphone app with real-time control allows installers to:

- Adjust AC output limits for local regulatory compliance
- Manage self-consumption, grid exports and battery charging schedules



Model Number TNK-5000-PV-E1 TNK-6000-PV-E1 Max. PV array power 8kW 9.6kW Max. input voltage 600V MPPT voltage range 90-520V Start voltage 90V No. of independent MPPTs / strings per MPPT input 2 2 Max. input current per MPPT 16A 16A Max. short circuit current per MPPT 24A 24A Nominal battery voltage 48V Battery voltage range 42-58V Max. charging / discharging power 5kW / 5kW 6kW / 6kW Max. charging / discharging current 105A / 105A 125A / 125A		Product Specifications – TNK P	V5/6
Max. input voltage 90.520V	Model Number		
MPPT voltage range		Max. PV array power	8kW 9.6kW
PV Input Start voltage 90V No. of independent MPPTs / strings per MPPT in	PV Input	Max. input voltage	600V
No. of independent MPPTs / strings per MPPT input 2 2 2 2 2 2 3 2 2 2		MPPT voltage range	90-520V
Max. input current per MPPT		Start voltage	90V
Max. short circuit current per MPPT		No. of independent MPPTs / strings per MPPT input	2 2
Nominal battery voltage A8V Battery voltage range A2-58V Battery voltage range A2-58V Battery voltage range A2-58V Max. charging / discharging power SkW / SkW / 6kW / 6kW Max. charging / discharging current 105A / 105A 125A / 125A Compatible battery TNK LV10 (TNK-10000-LV-AI Rated active power SkW 6kW Rated apparent power SkW 6kW AC voltage range 387-253V Rated AC frequency range 50Hz / 60Hz AC voltage range 35Hz / 56-65Hz Rated grid output current (@230V) 217A 261A Max. grid output current (@230V) 217A 261A Max. grid output current (@230V) 239V 6kW Rated grid frequency range 55KV 6kW Rated grid frequency 50Hz / 6kW Rated grid frequency 50Hz / 60Hz Rated grid frequency 50Hz / 60Hz Rated grid frequency 50Hz / 60Hz Rated input current from grid 32A 40A Max. juttery to lotage 78A 60A Max. input current from grid 32A 40A Max. juttery to lotage 78A 60A Max. juttery to lotage 78A 60A Max. juttery from grid 78A 60A Max. juttery from grid 78A 60A Max. district from grid 78A 60A Max. juttery from gri		Max. input current per MPPT	16A 16A
Sattery Input Battery voltage range 42-58V Max. charging / discharging power 5kW / 5kW 6kW / 6kW 6kW 5kW 6kW 6kW 5kW 6kW 6kW 5kW 6kW 6kW 5kW 6kW 6kW 6kW 6k		Max. short circuit current per MPPT	24A 24A
Max. charging / discharging power SkW / 5kW 6kW / 6kW / 6kW 6kW / 6kW 6kW / 6kW		Nominal battery voltage	48V
Output Max. Charging / discharging current SKW / SkW / SkW / SkW / SkW / SkW SkW / SkW SkW / SkW S	Battery Input/ Output	Battery voltage range	42-58V
Max. charging / discharging current		Max. charging / discharging power	5kW / 5kW 6kW / 6kW
AC Output SkW 6kW AC Voltage ange 187-253V AC voltage ange 187-253V Rated AC frequency range 50Hz / 60Hz AC girl frequency range 45-55Hz / 55-6Hz AC girl frequency range 45-55Hz / 55-6Hz AC girl frequency range 45-55Hz / 55-6Hz AC girl frequency 25A 30A Harmonics THDi (@Nominal Power) <2%		Max. charging / discharging current	105A / 105A 125A / 125A
AC Output SkVA 6kVA AC Output 1877253V AC Output 1877253V AC ordif frequency range 501±2 / 601±2 AC grid frequency range 45-55Hz / 55-65Hz Rated Qrid output current (@230V) 21.7A 26.1A Max grid output current 25A 30A AC Input Rated grid voltage 230V Rated grid voltage 230V Rated grid frequency 501±2 / 60Hz Rated grid protucurent from grid 32A 40A Max. input current from grid 32A 40A Max. Input current from grid 32B 40A Max. I rated apparent power 50Hz / 60Hz Max. I rated apparent power 50Hz / 60Hz Max. I rated apparent power 50Hz / 60Hz Rated current (@230V) 21.7A 26.1A Max. output current 318A 36.4A Max. switch time <10ms		Compatible battery	TNK LV10 (TNK-10000-LV-A1)
AC Output AC voltage range 187-253V AC Grid frequency range 45-58-1z / 60Hz AC grid frequency range 45-58-1z / 55-68-1z AC grid frequency range 25A 30A Harmonics THDi (@Nominal Power) 25A 30A AC Input Rated apparent power 5k/A 6k/A Rated grid voltage 230V Rated grid frequency 50Hz / 60Hz Rated grid frequency 50Hz / 60Hz Rated input current from grid 32A 40A Max. fracted apparent power 5kW 6kW Max. fracted apparent power 5kW 6kW Max. fracted apparent power 7kW 6cos 8kW 6cos 8kW 6cos 8kW 6cos 8kW 6kW Max. fractic (@20V) 32A 3A 3A 3A 3A 3A 3A 3A		Rated active power	5kW 6kW
Rated AC frequency range		Rated apparent power	5kVA 6kVA
AC grid frequency range		AC voltage range	187-253V
AC grid frequency range	AC 0t	Rated AC frequency range	50Hz / 60Hz
Max. grid output current 25A 30A Harmonics THDi (@Nominal Power) <2%	AC Output	AC grid frequency range	45-55Hz / 55-65Hz
Harmonics THDi (@Nominal Power)		Rated grid output current (@230V)	21.7A 26.1A
Rated apparent power SkVA 6kVA 6kVA Rated grid voltage 230V Rated grid voltage 250V S0Hz / 60Hz Rated grid frequency 50Hz / 60Hz Rated grid frequency 32A 40A Max. input current from grid 32A 40A Max. from the provided of the provided		Max. grid output current	25A 30A
AC Input Rated grid frequency 50Hz / 60Hz Rated input current from grid 25A 30A Max. input current from grid 32A 40A Nominal output voltage 230V Nominal output frequency 50Hz / 60Hz Max. / rated apparent power 5KW 6kW Peak output apparent power 7kVA (60s) 8kVA (60s) Rated current (@230V) 217A 261A Max. output current 318A 36.4A Max. output current 40ms Max. switch time 40ms Output THDi (@Linear load) 42% Max. efficiency 99.90% Euro efficiency 99.90% Max. efficiency 99.55.0% Max. battery to load efficiency 99.55.0% Max. battery to load efficiency 975.50% Max. efficiency 975.50%		Harmonics THDi (@Nominal Power)	<2%
AC Input Rated grid frequency 50Hz / 60Hz Rated input current from grid 25A 30A Max. input current from grid 32A 40A Nominal output voltage 230V Nominal output frequency 50Hz / 60Hz Max. / rated apparent power 5kW 6kW Peak output apparent power 7kVA (60s) 8kVA (60s) Rated current (@230V) 217A 261A Max. output current 31.8A 364A Max. output THDi (@Linear load) <2%	AC Input	Rated apparent power	5kVA 6kVA
Rated input current from grid 35A 30A Max. input current from grid 32A 40A Nominal output voltage 230V Nominal output frequency 50Hz / 60Hz Max. / rated apparent power 5kW 6kW Peak output apparent power 7kVA (60s) 8kVA (60s) Rated current (@230V) 21.7A 26.1A Max. output current 318A 36.4A Max. output current 40ms 40ms MPPT efficiency 99.90% Euro efficiency 99.90% Euro efficiency 99.20% Max. battery to load efficiency 995.51% DC switch ✓ 10ms All-pole sensitive residual current monitoring unit ✓ 20ms Anti-islanding protection ✓ 20ms AC output over current protection ✓ 20ms AC output over current protection ✓ 20ms AC over-voltage protection ✓ 20ms Power factor at rated power / adjustable displacement >0.99 / 0.8 leading to 0.8 laggi Dimensions (W/H/D) (405 x 480 x 205) mm Device weight 24.2kg Operating sound volume (typical) 30dB(A) Operating sound volume (typical) 30dB(A) Standby consumption 10W Cooling mechanism Natural convection Max. operating altitude 3000m User interface LEDs & app Meter interface Modbus RTU over RS485 Wireless Communication Other communication interfaces DRM Wirrenty 10 years		Rated grid voltage	230V
Protection 32A 40A Protection 320V Nominal output voltage 230V Nominal output frequency 50Hz 60Hz Max. / rated apparent power 5kW 6kW Peak output apparent power 7kVA (60s) 8kVA (60s) Rated current (@230V) 21.7A 26.1A Max. output current 31.8A 36.4A Max. switch time <10ms		Rated grid frequency	50Hz / 60Hz
EPS Output Nominal output voltage 230V EPS Output Nominal output frequency 50Hz / 60Hz Max. / rated apparent power 7kVA (60s) 8kVA (60s) Peak output apparent power 7kVA (60s) 8kVA (60s) Rated current (@230V) 217A 261A Max. output current 31.8A 36.4A Max. switch time <10ms		Rated input current from grid	25A 30A
EPS Outpute Nominal output frequency 50Hz / 60Hz Max. / rated apparent power 5kW 6kW Peak output apparent power 7kVA (60s) 8kVA (60s) Rated current (@230V) 21.7A 26.1A Max. output current 31.8A 36.4A Max. switch time <10ms		Max. input current from grid	32A 40A
EPS Output Max. / rated apparent power 5kW 6kW Peak output apparent power 7kVA (60s) 8kVA (60s) Rated current (@230V) 21.7A 26.1A Max. output current 31.8A 36.4A Max. switch time <10ms		Nominal output voltage	230V
EPS Output Peak output apparent power 7kVA (60s) 8kVA (60s) Rated current (@230V) 21.7A 26.1A Max. output current 31.8A 36.4A Max. switch time 10ms Output THDI (@Linear load) <2%		Nominal output frequency	50Hz / 60Hz
Rated current (@230V)		Max. / rated apparent power	5kW 6kW
Rated current (@230V)	-na a	Peak output apparent power	7kVA (60s) 8kVA (60s)
Max. switch time <10ms	EPS Output	Rated current (@230V)	21.7A 26.1A
Perficiency 99.90% Betriciency 99.90% Max. efficiency >96.20% Max. efficiency >97.50% Max. battery to load efficiency >93.51% DC switch ✓ PV string & battery input reverse polarity protection ✓ All-pole sensitive residual current monitoring unit ✓ Anti-islanding protection ✓ AC output over current protection ✓ AC output over current protection ✓ AC over-voltage protection ✓ Export power control ✓ Power factor at rated power / adjustable displacement >0.999 / 0.8 leading to 0.8 laggi Dimensions (W/H/D) (405 × 480 × 205) mm Device weight 24.2kg Operating temperature range -25°C - +60°C Operating sound volume (typical) 30dB(A) Standby consumption 10W Cooling mechanism Natural convection Environmental rating (per IEC 60529) IP66 Max. operating altitude 3000m Mod by sinterface CAN over RS485 Wieel		Max. output current	31.8A 36.4A
Efficiency 99.90% Euro efficiency >96.20% Max. efficiency >97.50% Max. battery to load efficiency >93.51% Profuse time in the protection of the		Max. switch time	<10ms
Euro efficiency >96.20% Max. efficiency >97.50% Max. battery to load efficiency >93.51% Protection PV string & battery input reverse polarity protection Image: color of a colo		Output THDi (@Linear load)	<2%
Max. efficiency >97.50% Max. battery to load efficiency >93.51% Protection PV string & battery input reverse polarity protection Image: Common polarity protection All-pole sensitive residual current monitoring unit Image: Common polarity protection Anti-islanding protection Image: Common polarity protection AC output over current protection Image: Common polarity protection AC over-voltage protection Image: Common polarity protection Export power control Image: Common polarity protection Power factor at rated power / adjustable displacement 10.99 / 0.8 leading to 0.8 lagging to 0.9 lagging lag		MPPT efficiency	99.90%
Max. efficiency >97.50% Max. battery to load efficiency >93.51% PV string & battery input reverse polarity protection All-pole sensitive residual current monitoring unit Anti-islanding protection AC output over current protection AC output over current protection AC over-voltage protection Export power control Power factor at rated power / adjustable displacement operating temperature range coperating sound volume (typical) Standby consumption 10W Cooling mechanism Natural convection Environmental rating (per IEC 60529) BMS interface CAN over RS485 Meter interface Modbus RTU over RS485 Wireless Communication interfaces DRM Warranty 10 years	Efficiency	Euro efficiency	>96.20%
Protection AC output over current protection AC output over current protection AC over-voltage protection Export power control Prover factor at rated power / adjustable displacement Dimensions (W/H/D) Device weight Operating temperature range Operating sound volume (typical) Standby consumption Cooling mechanism Power interface BMS interface BMS interface Wireless Communication Other communication interfaces DRM Warranty Over seld in very control in the face in the first of the control in the first of the con		Max. efficiency	>97.50%
PV string & battery input reverse polarity protection All-pole sensitive residual current monitoring unit Anti-islanding protection Ground fault protection AC output over current protection Short circuit current protection AC over-voltage protection Export power control Power factor at rated power / adjustable displacement Dimensions (W/H/D) Device weight Operating temperature range Operating sound volume (typical) Standby consumption Cooling mechanism Natural convection Environmental rating (per IEC 60529) IP66 Max. operating altitude Jower IEDs & app BMS interface Modbus RTU over RS485 Wireless Communication Other communication interfaces Warranty 10 years		Max. battery to load efficiency	>93.51%
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Power factor at rated power / adjustable displacement			•
Dimensions (W/H/D)	General Info	• •	>0.00 / 0.8 loading to 0.8 laggir
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Wireless CommunicationWi-Fi via data loggerOther communication interfacesDRMWarranty10 years			
Other communication interfaces DRM Warranty 10 years			
Warranty 10 years			
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Notes:

- AC power set to 4600W (nominal) and 4600VA (apparent) for VDE-AR-4105 grid code
- Max. output current limited to 21.7A (TNK-PV5) and 26.1A (TNK-PV6) when set to AS/NZS 4777.2 grid code

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