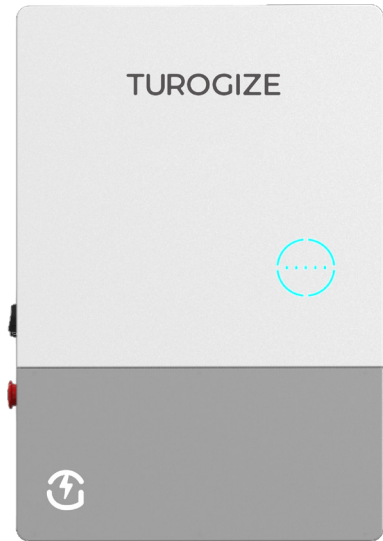


TGPower Home Energy Storage System

TGP-INV-HY-LV-11.5

11.5kW Single-phase Hybrid Inverter

- Smart Control** Control remotely through APP, connect to internet with wifi or ethernet cable
- Start Small, Scale Big** Extendable design supports up to 10 inverters in parallel, delivering larger power output as your home energy needs grow.
- Safety You Can Trust** Built-in arc fault protection, rapid shutdown, and flexible fault alarms provide uncompromising safety and full compliance with Canadian standards.
- High Efficiency, Lower Spending** Up to 97.6% conversion efficiency ensures you get the most out of every kilowatt, maximizing savings on your energy investment.
- Engineered for Outdoors** Rugged Type 4X protection and wide temperature tolerance make it ideal for Canadian outdoor installations, delivering reliable performance year-round.



Model	TGP-INV-HY-LV-11.5
Battery	
Battery type	Li-ion/Lead-acid
Battery voltage range (V)	40-60
Max. charge/discharge current (A)	200/200
Max. charge/discharge power (W)	9600/9600
Charging strategy for Li-ion battery	Self-adaption to BMS
Charging curve	3 Stages/Equalization
External temperature sensor	Optional
Communication	CAN
PV Input	
Recommended max. PV power (W)	14400
Max. input voltage (V)	550
Rated voltage (V)	380
Start-up voltage (V)	150
MPPT voltage range (V)	125-500
Max. input current (A)	32/32
Max. short circuit current (A)	40/40
MPPT number/Max. input strings number	2/4
AC Input and Output (On-grid)	
Rated output power (W) On-grid	11520
Max. output apparent power (VA)	11520
Max. input power (W)	19200
Rated AC output voltage/Range (V)	240, 211-264/208, 183-229 ⁽¹⁾
Rated grid frequency (Hz)	60
Max. output current (A)	48
Max. input current (A)	80
Power factor	>0.99 (0.8 leading ... 0.8 lagging)
THDi (@rated output)	<3%
AC Output (Off-grid)	
Rated output power (W)	9600
Max. output apparent power (VA) ⁽²⁾	19200, 10s
Back-up switch time (ms)	<2 (single machine operation)
Rated output voltage (V)	120/240 (split phase), 120/208 ⁽³⁾
Rated output frequency (Hz)	60
Max. continuous output current (A)	40
THDv (@linear load)	<3%
Efficiency	
MPPT efficiency	99.9%
Max. efficiency	97.6%

CEC efficiency	97.0%
Max. battery discharge to AC efficiency	95.0%
Protection	
Anti-islanding protection	Integrated
PV arc fault detection	Integrated
PV string input reverse polarity protection	Integrated
Compliant MLRSD products	Integrated
Insulation resistor detection	Integrated
Residual current monitoring unit	Integrated
AC over current protection	Integrated
AC short current protection	Integrated
AC overvoltage and undervoltage protection	Integrated
Surge protection	DC Type II/AC Type III
General	
Dimensions (W × H × D)	19.8 × 29.1 × 7.95 inch (502 × 740 × 202 mm)
Weight	90.4 lbs (41 kg)
Mounting	Wall mounting
Operating temperature	-13°F to +149°F (>113°F, derating)/-25°C to +65°C (>45°C, derating)
Relative humidity	0-95%, no condensing
Cooling	Natural convection
Topology (Solar/Battery)	Transformerless/High-frequency isolation
Altitude	≤6562 ft (2000 m)
Protection degree	Type 4X
Noise (dB)	<40
User interface	LED, App
Digital input/output	1 × DI, 2 × DO
Max. parallel	10
Communication	RS485, optional: Wi-Fi/Ethernet/4G ⁽³⁾
Warranty	10 Years
Certifications and Standards	
Grid connection standard	IEEE 1547-2018, IEEE 1547:1-2020, SRD2.0
Safety/EMC standard	UL 1741, CSA C22.2 No.107.1, UL 1741 CRD, UL 1741 SB, FCC Part 15 Class B
AFCI	UL 1699B
Software approval	UL 1998

(1) For 240 V, the grid profile is US, IEEE1547; for 208 V, the grid profile is IEEE1547_208V.
 (2) Can be achieved only if PV and battery power are sufficient.
 (3) The DTS-Ethernet and DTS-4G solutions will be coming soon.