

EI Inverter

TSI-3.8/7.6/11.4K-US

The hybrid Tigo EI Inverter is the centerpiece of the Tigo Energy Intelligence (EI) solution. It orchestrates energy production and consumption when coupled with a Tigo EI Battery. In addition, it enables module-level monitoring, optimization, and rapid shutdown when paired with Tigo TS4 MLPE.

Features

- Up to 200% DC oversizing (2:1 DC/AC ratio)
- 80 V starting voltage
- Multiple MPPTs (2, 3, and 4)
- Powered by the Tigo Energy Intelligence platform
- NEC 690.12 rapid shutdown compliant
- Built-in Wi-Fi
- Cellular communications for data backup (optional)
- 152 month standard warranty
- Lightweight (32/45 lb.)
- <10 min. commissioning (including Tigo TS4s) with EI mobile app

Specifications

	3.8K[1]	7.6K	11.4K
Input (PV)			
Max. Recommended power (STC)	7600 W	15200 W	22800 W
MPPT voltage range		80 V - 550 V[2]	
Full-load voltage range	150 V-500 V	200 V-500 V	220 V-500 V
MPPT	2	3	4
PV strings per MPPT		2	
Max. Input current per MPPT (I_{MP}/I_{SC})		13.5 A/16.9 A	
Battery (DC)			
Nominal DC voltage		400 V	
I/O DC current	Up to 11.1 A	Up to 21.7 A	Up to 32.5 A[3]
I/O DC power	4000 W	7800 W	11700 W[4]
Output (AC)			
Nominal power @208V/240 V	3290 W/ 3800 W	6580 W/ 7600 W	9880 W/ 11400 W
Max. apparent power	3800 VA	7600 VA	11400 VA
Nominal voltage		208 V/240 V	
Grid frequency		50/60 Hz	
Max. output current	16 A	32 A	48 A
Power factor (@nominal power)		>0.99	
Adjustable power factor		0.8 leading - 0.8 lagging	
THDI		<3%	
Grid connection type		L1/L2/N/PE	

[1] Not available in Puerto Rico
[2] The inverter enters standby above 550 V and risk of inverter damage over 600 V.
[3] Only compatible with GO Battery. With EI Battery, the limit is 10,300 W.

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Specifications

	3.8K[1]	7.6K	11.4K
Output (Backup)			
AC nominal power	3800 W	7600 W	11400 W
Max. AC power output	6000 VA[4]	12000 VA[4]	18000 VA[4]
Nominal AC voltage		240 V	
Max. output current	25 A[5]	50 A[5]	75 A[5]
THD		2% linear load - 5% non-linear load	
Efficiency			
Max. efficiency	98.0%	98.4%	98.5%
CEC efficiency @240 V/@208 V	97.0 %/ 97.0%	97.5%/ 97.0%	98.0%/ 97.5%
Protection			
DC reverse polarity		Yes	
DC disconnect switch		Yes	
DC surge		Type II	
Insulation resistance monitoring		Yes	
AC surge		Type III	
AC short-circuit		Yes	
Ground fault monitoring		Yes	
Grid monitoring		Yes	
Anti-islanding		Yes	
Residual-current monitoring unit		Yes	
AFCI Protection		Yes	
PVRSS rapid shutdown		With TS4-A-F/2F, TS4-A-O/S	
Module-level monitoring		With TS4-A-O/S	

[4] Only compatible with GO Battery with duration of 300 ms.
EI Battery: 4560 VA (3.8K), 9120 VA (7.6K), 13600 VA (11.4K)
[5] Only compatible with GO Battery with duration of 300 ms.
EI Battery: 19 A (3.8K), 38 A (7.6K), 56.7 A (11.4K)

	3.8K[1]	7.6K	11.4K
General			
Dimensions (W x D x H)	400 x 170 x 570 mm (15.8 x 7 x 22 in.)		400 x 187 x 638 mm (15.8 x 7.4 x 25.2 in.)
Weight	14.7 kg (32.3 lb.)		20.5 kg (45.2 lb.)
Operating temperature range	-25 °C - 60 °C (-13 °F - 140 °F) de-rating above 45 °C/113 °F		
Altitude	3000 m (9843 ft.)		
Internal consumption at night	<1 W PV/<5 W storage		
Cooling	Natural convection		
Enclosure	NEMA 4X/IP65		
Relative humidity	0-95%		
Certifications	FCC Part15B, UL1741:2021 Ed.3, UL1741:2021 Ed.3 (PVRSS) (SA) (SB), CSA 22.2-107.1:2016,UL1741 CRD: PCS, UL1699B, IEEE 1547:2018, IEEE 1547.1:2020, IEEE 2030.5 V2.1 certified gateway, HECO-SRD1547.1:2020 Ed.2		
Listings	CA-CEC, CA Rule21 CSIP, CA CPUC-SGIP, Hawaii Rule 14H, Rule 22, Rule 27 and Rule 32,Puerto Rico-OGPe		
Interfaces			
RS-485	Yes		
Wi-Fi/4G communication	Wi-Fi standard, 4G optional		
Warranty	152 months		
Revenue-grade meter	ANSI C12.20 (meets 0.5% accuracy)		

Resources

Home | Downloads | Help Center | Green Glove

Ordering Information

Part Number	Description
601-2103K8-0002[1]	3.8kW hybrid inverter, built-in Wi-Fi. Compatible with 50A ATS
601-2107K6-0002	7.6kW hybrid inverter, built-in Wi-Fi. Compatible with 50A ATS
601-2107K6-0003	7.6kW hybrid inverter, built-in Wi-Fi. Compatible with 200A ATS
601-2111K4-0003	11.4kW hybrid inverter, built-in Wi-Fi. Compatible with 200A ATS
301-300000-0001	Cellular Dongle Kit with 5 year prepaid plan

[1] Not available in Puerto Rico.