



# 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

- 3.8 kW, 7.6 kW, and 11.4 kW models
- 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 <sup>1</sup>	7.6K	11.4K
<b>Input (PV)</b>			
Max. recommended power (STC)	7600 W	15200 W	22800 W
Max. DC system voltage	600 V		
Startup voltage	80 V		
Full-load voltage range	80V~550 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		
I/O DC current	Up to 11.1 A	Up to 21.7 A	Up to 32.5 A
I/O DC power	4000 W	7800 W	10300 W
<b>Output (AC)</b>			
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 (@normal power)	>0.99		
Adjustable power factor	0.8 leading ~ 0.8 lagging		
THDI	<3%		
Grid connection type	L1/L2/N/PE		

<sup>1</sup> Not available in Puerto Rico.



## Specifications

	3.8K <sup>1</sup>	7.6K	11.4K
<b>Output (Backup)</b>			
Max. continuous power	3800 W	7600 W	11400 W
Backup peak power	4560 W	9120 W	13600 W
Nominal AC voltage	240 V		
Max. output current	16.7 A	32 A	48 A
THD	5%		
<b>Efficiency</b>			
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%
<b>Protection</b>			
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/M		

<sup>1</sup> Not available in Puerto Rico.

	3.8K <sup>1</sup>	7.6K	11.4K
<b>General</b>			
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 PART 15B, CSA 22.2 -107, IEEE 1547.1:2020, NEC 2020-690.12 PVRSS		
Listings	CEC, CA Rule 21 SGIP, Hawaiian Rule14H, HECO SRD 2.0		
<b>Interfaces</b>			
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)		

## Ordering Information

Part Number	Name	Description
601-2103K8-0003 <sup>1</sup>	TSI-3.8K-US	3.8 kW EI Inverter
601-2103K8-0503 <sup>1</sup>	TSI-3.8K-US	3.8 kW EI Inverter w/5 yr. cellular
601-2103K8-1003 <sup>1</sup>	TSI-3.8K-US	3.8 kW EI Inverter w/10 yr. cellular
601-2107K6-0002	TSI-7.6K-US	7.6 kW EI Inverter
601-2107K6-0502	TSI-7.6K-US	7.6 kW EI Inverter w/5 yr. cellular
601-2107K6-1002	TSI-7.6K-US	7.6 kW EI Inverter w/10 yr. cellular
601-2111K4-0003	TSI-11.4K-US	11.4 kW EI Inverter
601-2111K4-0503	TSI-11.4K-US	11.4 kW EI Inverter w/5 yr. cellular
601-2111K4-1003	TSI-11.4K-US	11.4 kW EI Inverter w/10 yr. cellular

<sup>1</sup> Not available in Puerto Rico.

## Resources

