



# EI Inverter

## TSI-3.8/7.6/11.4K-US Specification

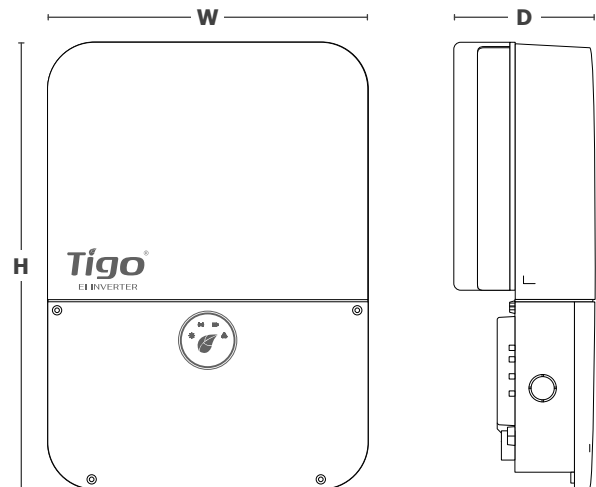
The Tigo EI Inverter is the centerpiece of the Tigo Energy Intelligence (EI) solution. It orchestrates energy production and the consumption (when coupled with the Tigo EI Battery). In addition, it enables module level monitoring, optimization, and rapid shutdown when paired with Tigo TS4 MLPE (Module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

### Features

- Available in 3.8 kW, 7.6 kW and 11.4 kW models
- Storage-ready 'hybrid' inverter
- Up to 200% DC oversizing (2:1 DC/AC ratio)
- 50V starting voltage
- Multiple MPPTs (2, 3, and 4)
- Built in Wi-Fi and Cellular communication (optional)
- Lightweight (32 lb/45 lb)
- <10 mins commission with EI App (incl. Tigo TS4)
- Connect up to 39.6kWh of EI battery storage per inverter
- Expanded backup power available from inverter

### Dimensions

	3.8/7.6K	11.4K
Dimensions (W x D x H)	400 x 170 x 570mm (15.75 x 7 x 22in)	400 x 187 x 638mm (15.75 x 7.4 x 25.2in)
Weight	14.65kg (32.3lbs)	20.5kg (45.2lbs)



Standard  
Warranty



Powered by Tigo  
Energy Intelligence



NEC Rapid Shutdown  
Compliant

Input Data	3.8K	7.6K	11.4K
Max. Recommended PV Power (STC)	7600W	15200W	22800W
Max. DC/AC Ratio	2		
Max. DC System Voltage	600V		
Startup Voltage	50V		
Nominal Voltage	360V		
Operating Voltage	50V~550V		
No. of MPPT	2	3	4
No. Of PV Strings per MPPT	2		
Max. Input Current per MPPT (Imp / Isc)	13.5A / 16.9A		

### Input/Output Data (Battery)

I/O Voltage Range	360V~550V		
Nominal DC Voltage	400V		
I/O DC Current	Up to 11.5A	Up to 23A	Up to 34A
I/O DC Power	4000W	7800W	10300W
Battery Technology	LFP		
Max number of battery enclosures	Up to 4		
Battery Capacity	9.9, 18.9, 29.7, 39.6kWh		

### Output Data (AC)

AC Nominal Power@240V AC	3800W	7600W	11400W
AC Nominal Power@208V AC	3290W	6580W	9880W
Max. AC Apparent Power	3800VA	7600VA	11400VA
Nominal AC Voltage	208V/240V		
AC Voltage Range @208V AC / @240V AC	183V~229V / 211V~264V		
AC Grid Frequency	50/60Hz		
AC Grid Frequency Range	45~65Hz		
Max. Output Current	16A	32A	48A
Power Factor(@Normal Power)	>0.99		
Adjustable Power Factor	0.8 Leading~0.8 Lagging		
THDI	<3%		
AC Grid Connection Type	L1/L2/N/PE		

### Output Data (Backup)

Max. Continuous Power	3800W	7600W	11400W
Peak Power	4560W	9120W	13680W
Nominal AC Voltage	240V		
Max. Output Current	16.7A	32A	48A
THD	5%		

### Efficiency

Max. Efficiency	98.0%	98.4%	98.5%
CEC Efficiency @240V AC / @208V	97.0 % / 97.0%	97.5% / 97.0%	98.0% / 97.5%

### Protection Devices

DC Reverse-polarity Protection	Yes
DC Disconnect Switch	Yes
DC Surge Protection	Type II
Insulation Resistance Monitoring	Yes
AC Surge Protection	Type III
AC Short-circuit Protection	Yes
Ground Fault Monitoring	Yes
Grid Monitoring	Yes
Anti-Islanding Protection	Yes
Residual-current Monitoring Unit	Yes
AFCI Protection	Yes
PVRSS Rapid Shutdown	TS4-A-F, TS4-A-O
Module-level Monitoring	TS4-A-O

### General Data

Operating Temperature Range	-25°C ~ +60°C (-13°F ~ +140°F) de-rating above 45°C/113°F
Altitude	3000m (9843ft)
Internal Consumption at Night	<1W (for PV Inverter) / <5W (for storage inverter)
Cooling	Natural Convection
Electronics Protection Degree	NEMA 4X (IP65)
Relative Humidity	0~95%

### Interfaces

RS485	Yes
WIFI/4G Communication	WIFI Standard / 4G Optional
Warranty	152 months
Revenue Grade Meter	ANSI C12.20 (meets 0.5% accuracy)

### Certifications

FCC PART 15B, UL 1741:2010 SA, UL 1741:2021 SB, UL1699B, CSA 22.2 -107, IEEE 1547.1:2020, CEC Listed, CA Rule21 SGIP Listed, Hawaiian Rule14H, HECO SRD 2.0 Listed, NEC 2020-690.12; Rapid Shutdown PVRSS System Listed



### Additional resources

