Tigo is dedicated to your success



More customers

- Install more sites in less time
- Serve more sites with the same equipment (shaded, mixed orientations, large & small, etc.)
- Provide the features your solar customers want and get more referrals

Lower operational expenses

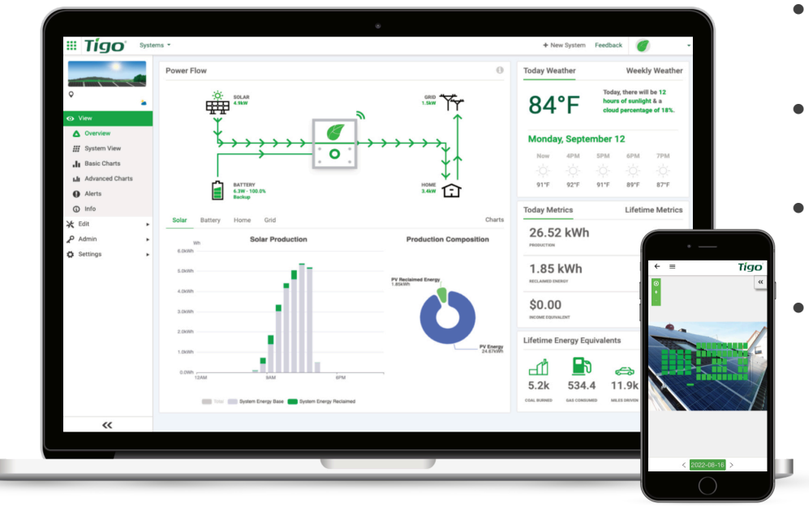
- Single solution from installation to post commissioning monitoring
- Simplify inventory management with a modular battery system
- Reduce truck rolls by remotely diagnosing issues

Unified by the Tigo Energy Intelligence (EI) platform

The most powerful solar commissioning and monitoring solution available

ANDROID APP ON Google play

Download on the App Store



Reduce truck rolls and get peace of mind that your systems are performing the way you designed and installed it. Benefits of the Tigo Energy Intelligence platform include:

- **Maximize site uptime** - Get real-time performance and safety alerts so you can quickly return the site to normal operation. More uptime = more energy
- **Minimize O&M costs** - Detect system, string, and module level issues to remotely pinpoint and diagnose issues before rolling a truck. Fewer truck rolls = more savings.
- **Enhance the customer experience** - Gain fleet level visibility using a single monitoring platform. Happier customers = more referrals.
- **Commission the complete system in <10 minutes** with the Tigo EI App.

Tigo EI App

Download the Tigo EI App



EI Energy Storage Single Phase

Tigo EI (Energy Intelligence) is a complete energy storage system that easily expands to accommodate customer's ever changing needs. The Tigo EI Battery stacks 3kWh blocks, easily allowing up to 12kWh of total energy. The Tigo EI Link is the keystone of the EI System. It is the communications hub and points for all grid, inverter, PV and battery connections. When paired with Tigo TS4 Flex MLPE, module level monitoring, optimization, and fire safety features can all be achieved with Tigo communications already built in.

Features

- Powered by Tigo TS4 optimizers for maximizing flexibility with module design
- Supporting 150% oversized PV power
- Providing back-up, time of use, and energy management
- Fast Charging and high discharge current from battery
- Responding time less than 250 ms
- Remote Monitoring and over the air upgrade
- Working in full load under extreme cold condition
- Fast installation and commissioning
- Industry leading warranty

Powered by Tigo Energy Intelligence

Storage ready hybrid

PN: 002-00114-00 | Rev. 1.2 | 2023.11.07

EI Inverter

DC Input	TSI-3K1D	TSI-5K1D	TSI-6K1D
Max PV input power (W)	4500	7500	9000
Max PV input voltage (V)		600	
Startup voltage (V)		90	
MPPT operating voltage (V)		70 - 550	
Number of MPPT trackers/strings per MPPT		2/1	
Max input current per input (Imp/Isc) (A)		16/20	

AC input & output			
Nominal AC output power (W)	3000	5000*	6000
Max AC output apparent power (VA)	3300	5500	6600
Nominal/Max AC output current (A)	13/14.4	21.7/23.6	26.1/28.6
Max AC input apparent power (VA)	6300	9200	9200
Max AC input current (A)	27.4	40	40
Nominal AC voltage (V)		220/230/240	
Grid frequency (Hz)		50/60	
Power factor		0.8 leading - 0.8 lagging	
THDi (%) *4600W for VDE4105		<2	

Battery data	
Battery Type	$LiFePO_4$ (LFP)
Battery voltage range (V)	80 - 480
Max continuous charge/discharge (A)	30/30

Off-grid output (with battery)			
Nominal output power (W)	3000	5000	6000
Peak apparent power (VA)	3600, 1h	6000, 1hr	7200, 10 min
Max continuous current (A)	13	21.7	26.1
THDv (%)		<2	
Switch over time (ms)		250	

System Data	
MPPT efficiency (%)	>99
Max/Euro efficiency (%)	97.6/97.0
Battery charge/discharge efficiency (%)	97.0
Standby consumption @ Night (W)	<3
Protection rating	IP65
Operating temperature (°C)	-35 to 60 (derating >45)
Storage Temperature (°C)	-40 to 70
Max operating altitude (m)	<3000
Humidity (%)	0 - 100% non-condensing
Noise emission (dB)	<30
Cooling	Natural convection
Dimensions (WxHxD) (mm)	482x417x181
Weight (kg)	22
Communications	RS485, Ethernet, WiFi, LCD interface, Tigo EI App

Standard	
Safety	EN/IEC62109-1/-2
EMC	EN61000-6-1/2/3/4; EN61000-3-2/3/11/12
Certification	VDE4105/G98/G99/AS4777/EN50549-1:2019/CEI 0-21/IEC61727/ RD1699/UNE 206007-1/NRS 097-2/VDE0124

EI Link

PV	TSS-1PS
Max PV input power (Vdc)	600
Max Short circuit current, inputs A/B (A)	20/20

Battery	
Battery voltage range (V)	80 - 480
Max. Charge/discharge current (A)	30/30

On Grid (Inverter)	
Rated voltage (Vac), Frequency (Hz)	220/230/240, 50/60
Max. Grid (Inv) input/output current (A)	32/32

Off-grid (Inverter)	
Rated voltage (Vac), Frequency (Hz)	220/230/240, 50/60
Max. current (A)	32

Grid (Utility)	
Rated voltage (Vac), Frequency (Hz)	220/230/240, 50/60
Max. input/output current (A)	60/60

Load	
Rated voltage (Vac), Frequency (Hz)	220/230/240, 50/60
Max. input/output current (A)	60

Enviromental limit	
Degree of protection	IP54
Protection class	Class I
Operating temperature (°C)	-35 to 60 (derating >45)
Storage temperature (°C)	-40 to 70
Relative Humidity (%)	100
Max Altitude (m)	3000
Overvoltage catergory	III (AC), II (DC)

Other	
Cooling concept	Nature convection

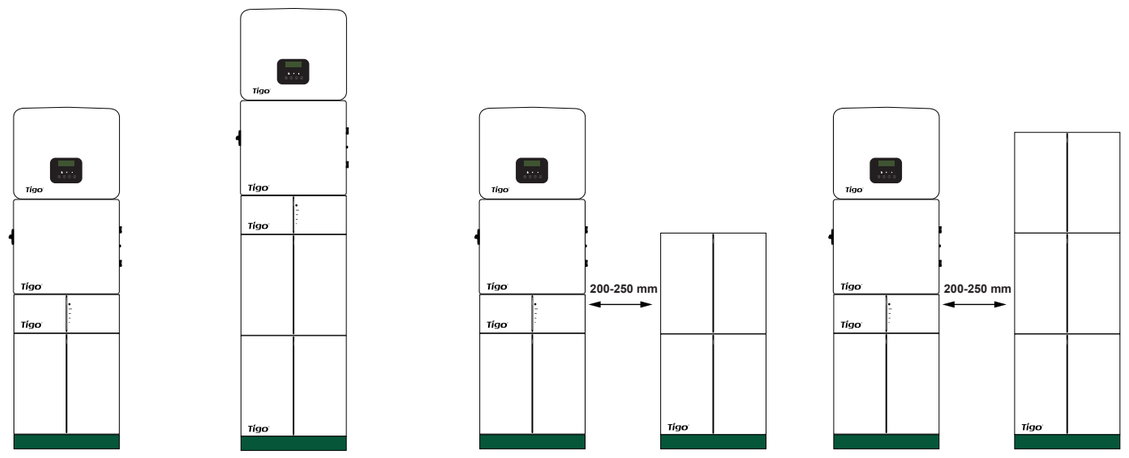
Dimensions and Weight	
Dimensions (WxHxD) (mm)	482 x 437 x 184.5
Net Weight (kg)	10

EI Battery

	TSB-3	TSB-6	TSB-9	TSB-12
Norminal Voltage (V)	102.4	204.8	307.2	409.6
Operating voltage range (V)	90-116	180-232	270-348	360-464
Total Energy (kWh)	3	6.1	9.2	12.2
Usable energy[1] (kWh)	2.7	5.5	8.3	10.9
Normal power (kW)	2.5	5.1	7.6	10.2
Max. Power (kW)	3	6.1	9.2	12.2
Max. charge/discharge current (A)		30		
Battery efficiency (%)		95		
Cycle life (90% DoD)		6000 cycles		
Available charge/discharge temperature range (°C)		-30 to 50		
Storage temperature (°C)		-20 to 50		
Relative humidity (%)		0 - 100		
Max altitude (m)		3000		
Degree of protection		IP65		
Battery to inverter		RS485/CAN2.0		
Battery to battery/BMS		CAN 2.0		
Certifications		CE/IEC62619/UN38.3/IEC62040/UKCA		
Hazardous materials		Class 9		
Dimensions (WxHxD) (mm)		EI BMS: 482*173.5*153x153		
		TSB : 482.5*471.5*153		
Net Weight (kg)		EI BMS: 7.5 TSB: 34.5 per battery enclosure		

1) test condition 90% DoD, 0.2C charge and discharge @ 25°C
2) EI BMS: one EI BMS can connect up to 4 TSB-3

Single Phase energy storage configurations:



3kWh 6kWh 9kWh 12kWh