# Embrace solar freedom with Tigo TS4 Flex MLPE

Image courtesy: GEM Energy Australia

Tigo's industry leading TS4 platform of Flex MLPE (Module Level Power Electronics) connects to your PV modules to unlock multiple benefits for your PV system, including:

- Increased output with module level optimization
- Lower maintenance costs with module level visibility
- Enhanced safety with module level rapid shutdown

Sites require just a few main components to unlock the benefits of optimization, advanced module-level monitoring, and enhanced safety. Each TS4 can be attached to a PV module in a matter of seconds.

Tigo TS4 is the only platform that lets you choose the equipment and features that maximize the benefit for your installation. Solutions can be applied to existing PV installations or new ones at virtually any scale.





## Flexible

Choose the right feature set for performance, monitoring and/or PV safe systems. Reliable inverter interface with 200+ inverters across 20+ companies.



## Simple

As low as 10-second installation per module. Wireless protocol facilitates incremental activation & troubleshooting while commissioning.



## Trusted

From the North to the South Pole, Tigo installations range from <10 kW to >10 MW in size. Over 1 GWh daily monitored production providing Energy Intelligence with advanced data analytics.



## Enhance the economics of your PV system

Whether you need to meet safety code, want module level visibility or to reduce the impacts from shading, Tigo has you covered. With Tigo TS4, you can mix and match any of the features listed below.



## **OPTIMIZATION Increase energy output**

degradation, and other issues.



## **Tigo TS4** Flex MLPE

With Tigo, only pay for what you need to maximize the benefit of your PV installation.





CCA & TAP REQUIRED SEE SCHEMATIC BELOW

**OPTIONS** 

May be selectively deployed

	2327		
			A5
181 187	176	76	60
B1 B2	B3	B4	B5
187	94	50	51
C1	C3	C4	C5
182 185	95	29	35
	D3	D4	D5
184 181	107	51	35
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## MONITORING Lower operating expenses

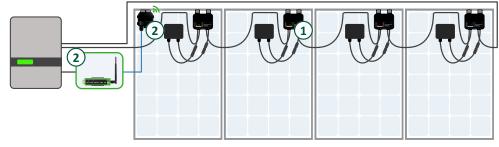
Tigo gives you granular, module level monitoring with its Energy Intelligence Platform. Diagnose anomalies at the module level, increase bankability, and lower maintenance expenses.

Tigo Optimizers get the maximum energy output from your array

and minimize the losses from shading, module mismatch,

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## SCHEMATIC | O,S,M Monitoring enabled smart devices



## 1. TS4: 0, S, M

Tigo TS4 units are connected to each module. Customers can selectively deploy any combination of the TS4-A-O, S, or M products to maximize returns for their particular site.

## 2. CCA & TAP

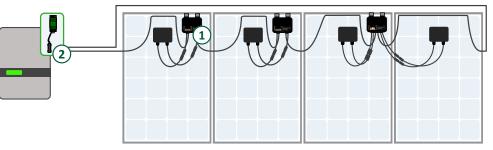
Tigo's Cloud Connect Advanced (CCA) is the data hub for TS4s and other devices (inverter, battery, etc.). It connects with an RS485 cable to the TAP which wirelessly communicates with TS4s.



## **RAPID SHUTDOWN**

**Enhance safety and compliance** Tigo solutions meet US NEC Rapid Shutdown compliance and other safety codes that protect first responders and are required

## SCHEMATIC, F, 2F **Dedicated**, reliable rapid shutdown devices



## 1. TS4: F or 2F

Tigo's Fire Safety line of TS4 are completely dedicated to the rapid shutdown function and communication via PLC with the RSS Transmitter.

### 2. Required: RSS Transmitter The Tigo Rapid Shutdown System (RSS) Transmitter enables UL PVRSS certified rapid shutdown with TS4-A-F and 2F

Contact us https://www.tigoenergy.com/contacts



## 3. Tigo Energy Intelligence

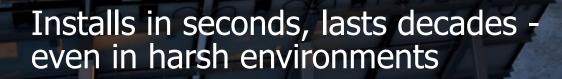
All of the module-level data, and any third party data connected to Tigo's CCA can be viewed in Tigo's Energy Intelligence monitoring system.

units to meet required safety codes.

## 3. Monitoring: Inverter

Tigo's TS4-A-F and -2F are dedicated rapid shutdown devices. Inverter monitoring may provide DC data at the string, MPPT or array level.





Princess Elisabeth Station Antarctica



## **10 seconds per module**

Each TS4 connects to the PV module at the junction box and clips to the module frame. Plug and play with your PV system.



## No ground wire required

Tigo TS4 do not need a separate ground wire or mounting bolts for installations.



## Water and corrosion resistant

Polycarbonate cover is water-resistant to 1.5m deep - proven in the harshest environments from Antarctica to the Atacama desert.

## **About Tigo**

Tigo is the worldwide leader in Flex MLPE (Module Level Power Electronics) with innovative solutions that significantly enhance safety, increase energy production, and decrease operating costs of photovoltaic (PV) systems. Tigo's TS4 platform maximizes the benefit of PV systems and provides customers with the most scalable, versatile, and reliable MLPE solution available.

Tigo was founded in Silicon Valley in 2007 to accelerate the adoption of solar energy worldwide. Tigo systems operate on 7 continents and produce gigawatt hours of reliable, clean, affordable and safe solar energy daily. Tigo's global team is dedicated to making the best MLPE on earth so more people can enjoy the benefits of solar.



