

# Achieving Module Level Shutdown

with Yaskawa - Solectria Solar and Tigo

## How is module level shutdown achieved?

Yaskawa - Solectria Solar's three-phase string inverters, PVI 23/28/36TL paired with Tigo's module optimizers provide a certified solution to UL1741 as a PV Rapid Shutdown System, for compliance with NEC 2017 690.12(D) requirements. To meet these requirements, Tigo's UL and IEC-certified optimizers, TS4-L and TS4-O, discharge the capacitors in the inverter to ensure zero voltage at shutdown.

## Which products are compatible?

Yaskawa - Solectria Solar's PVI 23/28/36TL are fully compatible with Tigo's TS4-B Module Junction Box or TS4-R Retrofit/Add-On.

## What options are available for rapid shutdown?

Tigo's Module Junction Box product offers an assortment of options to choose from. The Safety (TS4-S), Optimization (TS4-O), and Long Strings (TS4-L) offer a solution to meet NEC 690.12 rapid shutdown requirements.



PVI 23/28/36TL



**Tigo** TS4-B with TS4-D, TS4-M, TS4-S, TS4-O, TS4-L covers

## Tigo's Module Junction Box Cover Options

### SAFETY TS4-S



- Meet NEC 2014 690.12 rapid shutdown requirement
- Module-level deactivation
- Automatic or manual shutdown
- Plus all the benefits of Monitoring (TS4-M)

### OPTIMIZATION TS4-O



- Shade and age tolerance
- Enhanced energy yield
- Greater design flexibility
- Maximized roof usage
- Plus all the benefits of Safety (TS4-S) and Monitoring (TS4-M)

### LONG STRINGS TS4-L



- String length increased by up to 30%
- Fewer BOS components
- Faster installation
- Inverter optimization
- Lower wire-losses
- Plus all the benefits of Optimization (TS4-O), Safety (TS4-S) and Monitoring (TS4-M)

For additional options and to learn more about the TS4 Platform, visit [www.tigoenergy.com/ts4/](http://www.tigoenergy.com/ts4/).

Contact Yaskawa - Solectria Solar for more information and start your order today email [inverters@solectria.com](mailto:inverters@solectria.com) or call (978) 683-9700