

energy Tigo Energy®

Maximizer[™] Management Unit (MMU)

Data Sheet



For residential, commercial and utility scale PV arrays, the Tigo Energy® Maximizer™ System optimizes power output per each module (solar panel); delivers module-level data for operational management and performance monitoring; and provides the ability to deactivate the high voltage DC bus for safer installation, maintenance or fire fighting. The Tigo Energy Maximizer Management Unit (MMU) communicates between the Module Maximizers and the Inverter, controls processes in real time and sends data to a remote server in order to allow multiple users to observe and interact with the monitoring system.

Each Tigo Energy Maximizer system (patented) includes one MMU per project, with the option of a second unit for system redundancy. The MMU has a manual user interface and LCD display housed in a NEMA3 enclosure for onsite programming. The MMU mounts near the inverter and communicates with each PV module in the system, provides management and control functions for the module Maximizers, and serves as a gateway to the Data Center. The Maximizer Management Unit is pre-configured with CAT-5 Ethernet access. The MMU can be used as a qualifying inverter and overall system performance monitoring interface for legacy installations.

The MMU includes the Tigo Energy® PV-SAFE™ button - a unique onsite safety feature located on the front of the Maximizer Management Unit. With one push of the red button, an onsite operator or emergency personnel can deactivate the entire array for maintenance or emergency purposes (patented). PV-Safe enables each module to be electrically removed from the high voltage DC cabling limiting the voltage exposure to the open-circuit voltage (Voc) of a single module. As part of the Tigo Energy system, this function can be activated with the safety button or via a remote management console. The system can be installed, maintained or approached by fire personnel without the exposure to voltage levels typically in excess of 400 volts.



Secure remote access to the MMU via the Tigo Energy MaxiManager software applications is available through any internet-enabled computer, with views available for system owners, installers, power plant operators and emergency services personnel. Simple, easy-to-understand graphics allow for quick analysis of the real-time output and historical performance of each system, and the ability to view and remedy system faults, error codes or alerts.

Ask your PV Distribution partner for the Tigo Energy Maximizer Management Unit for your new or existing PV Systems.

Maximizer Management Unit **Technical Specifications**

Electrical Specification

Single MMU supports up to 360 Module Maximizers

Communication (MMU to Data Center)

Ethernet

Mechanical Specifications

Dimensions (W x H x D) 229 x 233 x 116 mm

Weight 1000 gm **Environmental Rating** NEMA 3R Operating Temperature 0° to $+70^{\circ}$ C

Optimize the energy harvest of your PV system using the Tigo **Energy Maximizer to:**

- accelerate system payback
- maximize the power output of individual modules
- reconsider previously unfavorable projects rejected because of shade or orientation
- maintain best-in-class conversion efficiency
- manage the system with module-level data to minimize operational costs and keep the system at peak performance throughout its lifetime
- introduce an unprecedented level of safety for new and existing PV solar installations (patented)
- · simplify the balance-of-system design, especially for high Voc or thin-film modules









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