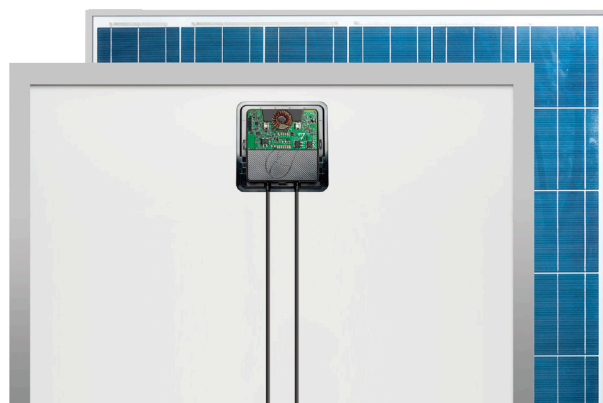


Trina^{smart} DC

THE OPTIMIZED SOLUTION



COMPATIBLE WITH MOST TRINA MODULES

245-310 W
POWER OUTPUT RANGE

FULLY INTEGRATED SMART SOLUTION

As a leading global manufacturer of next generation photovoltaic products, we believe close cooperation with our partners is critical to success. With local presence around the globe, Trina is able to provide exceptional service to each customer in each market and supplement our innovative, reliable products with the backing of Trina as a strong, bankable partner. We are committed to building strategic, mutually beneficial collaboration with installers, developers, distributors and other partners as the backbone of our shared success in driving Smart Energy Together.

Trina Solar Limited
www.trinasolar.com

Trinasolar
Smart Energy Together



Safer Solar

- Panel-level disconnect to remotely deactivate modules
- Arc, fire and safety hazard mitigation



More Efficient O&M

- Panel-level monitoring to pinpoint problems
- Detailed real-time alerts and analytics



Highest Power Density

- Install more modules on any roof
- Uneven string lengths enables design flexibility



Maximized Energy Harvest

- Impedance matching technology eliminates mismatch losses
- More power from each module bin



Lower BOS Costs from Smart Curve Technology

- 30% lower max open circuit voltage, 30% longer strings
- Fewer combiners, fuses and copper wiring required



Fully Integrated

- Compatible with any inverter
- No additional boxes to mount on module

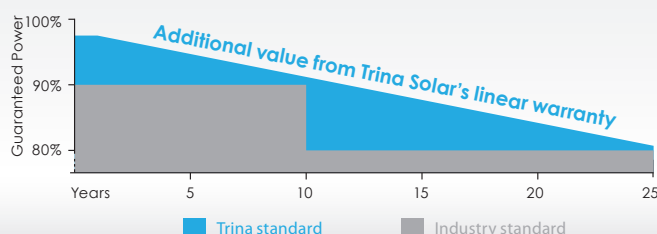


Highly reliable due to stringent quality control

- PID resistant

LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty • 25 Year Linear Power Warranty



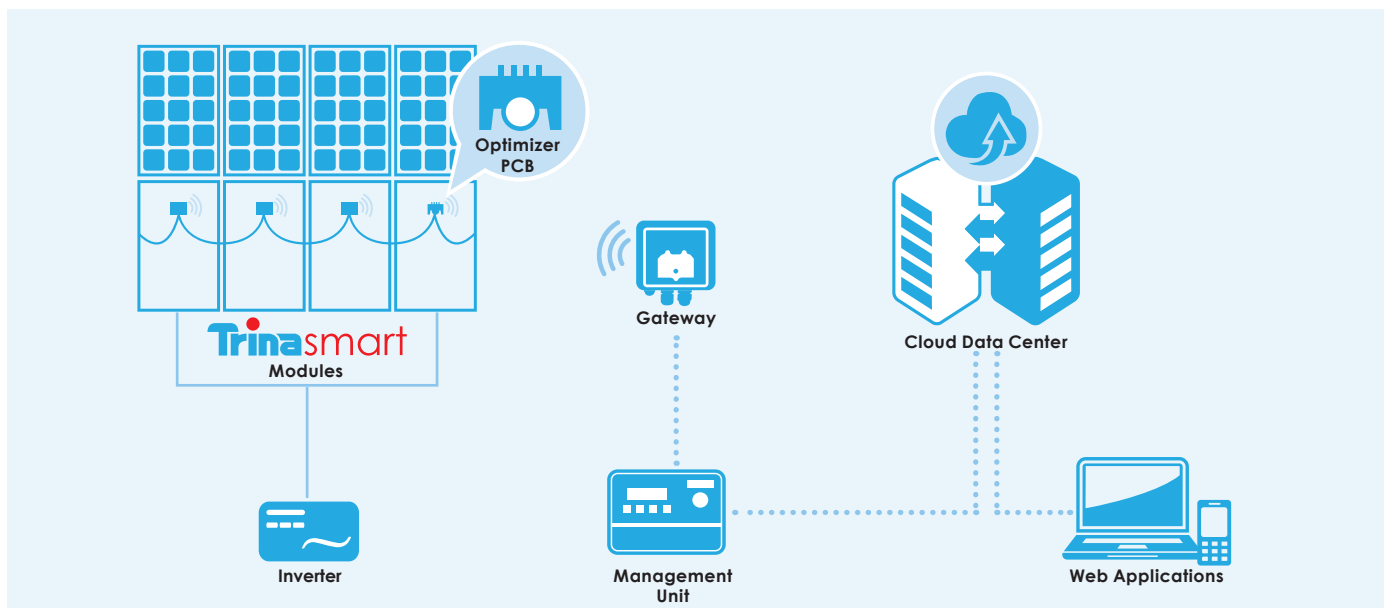
Trinasmart DC

Trinasmart modules incorporate innovative power electronics from Tigo Energy to achieve module-level diagnostics, maximum energy harvest through module level DC power optimization, and reduction of arc, fire and safety hazards.

Integration of the module optimizer into the junction-box enables patented Smart Curve technology, which allows up to 30% longer strings and significant balance-of-system (BOS) savings.

SYSTEM ARCHITECTURE

Trinasmart system components work together with any inverter to maximize energy harvest. Trinasmart modules communicate wirelessly through the gateway, allowing users to monitor system performance in real time.

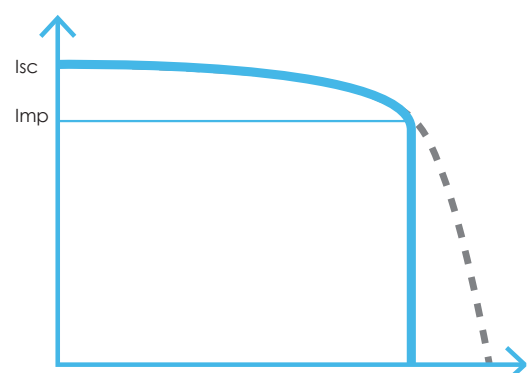


SMART CURVE TECHNOLOGY

Module-integrated Trinasmart technology reduces the open circuit voltage range for each module and allows longer strings to be designed. The maximum voltage is programmed by Trina Solar in the factory.

- Hardware voltage clamp prevents over-voltage
- Design up to 30% longer strings
- Fewer combiner boxes, fuses and wiring

■ With Smart-Curve ■ Without Smart-Curve



THE OPTIMIZED SOLUTION

MAXIMIZER MANAGEMENT UNIT (MMU)

The management unit controls processes in real time and sends data to a remote server for monitoring.

SPECIFICATIONS ONE UNIT SUPPORTS UP TO 360 TRINASMART MODULES		
Communication	Data Backhaul	Ethernet (MMU to Data Center)
	On-Screen Prompts	Module (power, voltage, signal), Internet Check, basic troubleshooting
	PV-Safe	Button deactivates the array (at the module-level)
	Accessories	Pull data from most meters that speak Modbus (i.e. AC Meters)
	Inverter Data	Can pull data from most inverters (SMA, Power One, Fronius, Kaco)
Power	Compatibility	110 / 230V compatible converter (comes with international plugs)
Mechanical Specifications	Dimensions (L x W x H)	225.5 x 226 x 125 mm
	Weight	1 kg
	Environmental Rating	NEMA 3R
	Operating Temperature	0° to +70° C

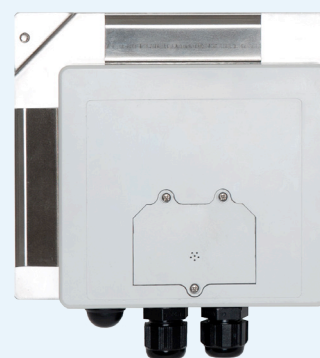


Maximizer Management Unit (MMU)
An internet connection is required for full monitoring functionality.

GATEWAY

The Gateway provides wireless communication with up to 120 Trinasmart modules and the MMU. Up to seven Gateways can be connected to a single MMU.

GATEWAY SPECIFICATIONS		
MMU Communications	Wireless (802.15)	
	RS-485 cable connection; in series with other Gateways	
Mounting Location	Center of array	
Mounting Method	Mounted to module frame or rack Clips included for frame mounting	
Wireless Range	15m line-of-sight	
Maximum number of Trinasmart modules per Gateway	120	
Mechanical Specifications	Dimensions	141.3 x 48.5x 33.3mm (with bracket)
	Weight	0.9kg
	Operating temperature range	-30°C +70°C
	Enclosure environmental rating	IP 65



Gateway
The wireless communications system is FCC and CE Class 2 certified. Fixing hole comes with a M3.5X6 SST pan head screw.

MONITORING SERVICE

Trinasmart monitoring provides total insight into the performance of any system. You can choose to upgrade online once your system is installed.



Explore the monitoring portal at
www.trinasmart.com

FEATURES	FREE	PREMIUM
Reports	Monthly	Daily
1-min data granularity	current&previous month	Full History
Full history	•	•
Safety alerts	•	•
Dashboard showing enviomental impact	•	•
Trending data charts	•	•
Performance analytics		•
Ability to download		•
Device Integration		•
Performance alerts		•

