



## Tigo Energy<sup>®</sup> Smart Junction Box - MM-JES

### Features:

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- Cost-neutral installations and ongoing optimization benefits
- Limiting PV module output voltage with patented smart curve technology
- Dual certification from TÜV Rheinland and CSA Group
- Rated for 600/1000 VDC (UL)/1000 VDC (EN)
- IP65/67, NEMA3R rated enclosure type
- PV1-F, PV Wire Cable type with flexible length available



The Tigo Energy Junction Box is designed to integrate seamlessly with the industry-leading Smart Module system. The unit is assembled on the PV module at the factory, and together it compiles to a Smart Module. In addition, the Smart Modules can be mixed with Dual Maximizer in the same system – they can be connected on the same string, and can use the same MMU and Gateway communications system simultaneously.

## Junction Box - ES Series Technical Specifications

### MM-JES50

#### Electrical Ratings

##### Input

Nominal Input Power	375W
Absolute Maximum Input Voltage (Voc)	52Vdc
MPPT Operating Voltage Range (Vmp)	16-48Vdc
Maximum Input Current (Isc)	10A
Maximum Continuous Input Current (Imp)	9.5A

##### Output

Maximum Output Power	375W
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#### Mechanical

Ambient temperature range	-40°C to +85°C (-40°F to +185°F)
Storage temperature range	-40°C to +85°C (-40°F to +185°F)
Cooling method	Natural convection
Dimensions (with bracket)	171 x 155 x 22.3
Weight	550 Gr (1.20 LB)
Environmental rating	IP65/67, NEMA 3R

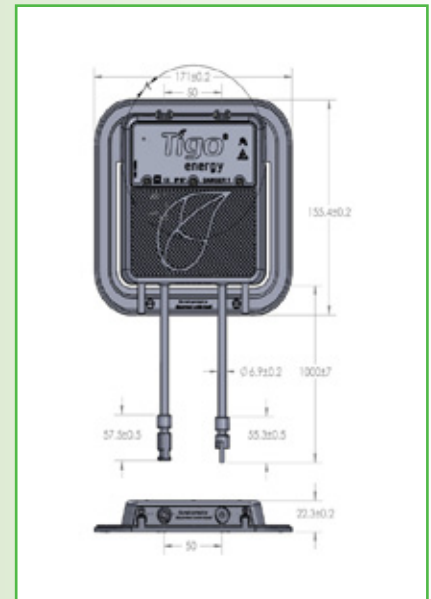
#### Cabling

Cabling Type	PV1-F, PV wire
Cable length	1.1m
Connector	MC4 / other connectors per demand
UV resistance	500 hr with UV light between 300-400nm @ 65C
Maximum string Voltage	600V/1000V dual rated
Outer Cable Diameter	6.9 ± 0.2 mm
Wire cross section	4.0mm <sup>2</sup> (12AWG)

#### Compliance

Safety	CSA C22.2 No. 107.1-01, UL 1741 2nd Edition, EN 62109-1: 2010, Protection Class II
EMC	CE Council Directives 2004/108/EC, VCCI Japan Council / CISPR22, FCC Part 15B 2010, Radio Approval
Environmental	Pollution Degree 3
Installation	Application Class A, Over voltage category III
Additional	Tested with impulse voltage at 8kV, Flammability Class 5V

### Mechanical Dimensions:



### Ordering Information:

#### PV Module Manufacturer?

Contact: [sales@tigoenergy.com](mailto:sales@tigoenergy.com)  
Or call: 1.408.402.0802

#### Looking for a fully assembled Smart Module?

Contact our partners listed in:  
<http://www.tigoenergy.com/products>



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