

# TSUN GEN3 Microinverter

TSOL-MX400 TSOL-MX450 TSOL-MX500



## Maximized Efficiency

Individual optimization, se-parate dedicated MPPT for each panel.

New topology design, max. efficiency up to 96.7%.

## Flexibility

Suitable for TSOL-ESK series AC module solution.

Plug & play installation, Easy to install.

## Safety

Max. DC voltage 60V. No threat for high DC voltage.

Integrated LoM protection function. Ensure the safety of power grid.

## Reliability

Die casting design and glue filling technology. Better thermal dissipation.

Standard 12 years warranty, Quality guaranteed.

CE VDE 0126 VDE 4105 EN 50549 RD 1699 G 98

**TSUNESS Co., Ltd**

sales@tsun-ess.com www.tsun-ess.com +86-512-66186028

# Technical Data

Model	TSOL-MX400	TSOL-MX450	TSOL-MX500
<b>Input Data (DC)</b>			
Recommended Module Power (Wp)		300 - 600+	
Start up Voltage per Input@Rated condition (V)		22	
MPPT Voltage Range per Input (V)		16 - 60	
Nominal DC voltage(V)		42	
Max. Input Voltage per Input (V)		60	
Short-current(A)		20	
Max. Input Current per Input (A)		1 × 14	
Quantity of MPPTs		1	
Number of Inputs per MPPT		1	
Max. inverter backfeed current to the array (A)		0	
<b>Output Data (AC)</b>			
Max. Continuous Output Power (VA)	400	450	500
Nominal Continuous Output Power (W)	400	450	500
Nominal Output Current (A)	1.74	1.96	2.17
Max. Output Current (A)	2.00	2.25	2.50
Nominal Output Voltage (V)		220/230/240, L/N/PE	
Nominal Frequency (Hz)		50/60	
Power Factor		>0.99 default	0.8 leading ... 0.8 lagging
Output Current Harmonic Distortion		<3%	
Max. Units Per Branch (12AWG)	17	15	13
Max. Units Per Branch (10AWG) *	23	20	18

\* 10 AWG cable is optional, please contact TSUN for more details

## General Data

General Data	<50 mW
Communication	WiFi module
Type of Enclosure	IP67
Cooling	Natural convection
AC Cable	1.45m
Type of isolation	Galvanically Isolated HF Transformer
Operating Ambient Temperature Range	-40 ~ +65 °C (derating of over 50°C Ambient Temperature@ PV input 30V)
Compliance	EN 50549-1: 2019, VDE-AR-N 4105: 2018, VFR2018, IEC/EN 62109-1/-2, CEI 0-21: 2022 / IEC/EN 61000-6-1/-2/-3/-4, IEC/EN 61000-3-2/-3

## Efficiency

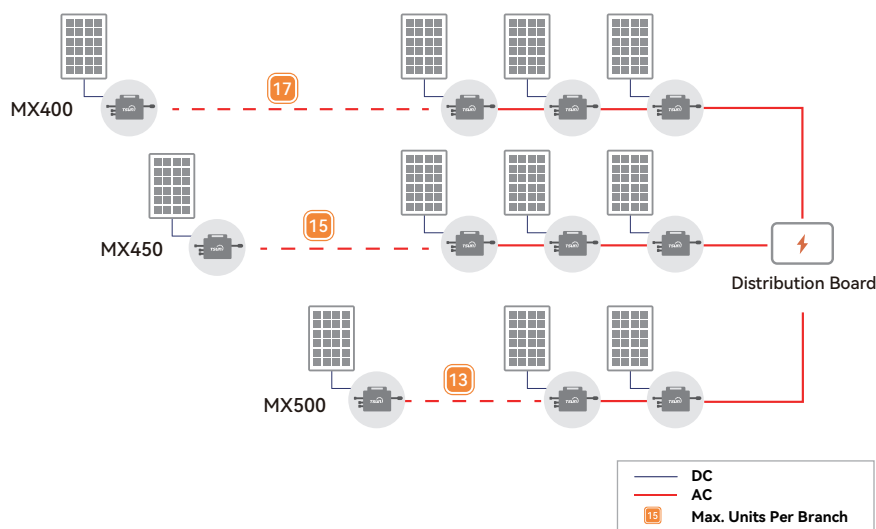
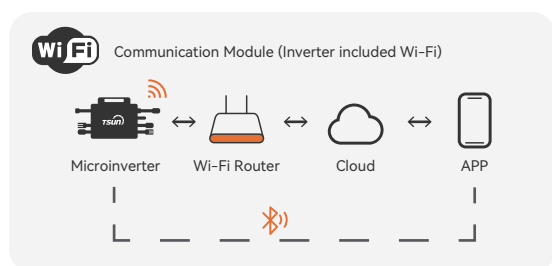
Peak Inverter Efficiency	97.0%	CEC Weighted Efficiency	96.7%
EU Weighted Efficiency	96.7%	Nominal Mppt Efficiency	99.9%

## Mechanical Data

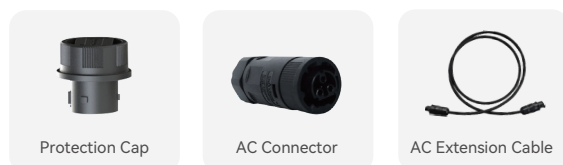
Dimensions (W×H×D mm)	164x225x30
Weight [kg]	2.1
Pallet	150

\* The AC voltage and frequency range may vary depending on specific country grid.

## Diagram



## Optional Accessories



For more information, please contact us at [www.tsun-ess.com](http://www.tsun-ess.com)

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