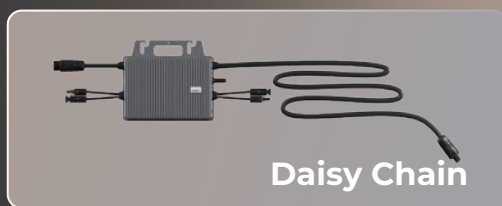


GEN3 Microinverter (2-in-1)

TSOL-MS600/MS700/MS800/MX800/MX900/MX1000



Daisy Chain



Trunk Cable & Balcony

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.



VDE 0126 VDE 4105 EN 50549 INMETRO RD 1699 G 98

TSUNESS Co., Ltd

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Technical Data (Daisy Chain)

Model	MS600	MS700	MS800	MX800	MX900	MX1000
Input(DC)						
Recommended Module Power (Wp)	300 ~ 550+	300 ~ 550+	300 ~ 550+	300 ~ 600+	300 ~ 600+	300 ~ 600+
Quantity of PV Module	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2
Start up Voltage per Input@Rated condition (V)	22	22	22	22	22	22
MPPT Voltage Range per Input (V)	16 ~ 60	16 ~ 60	16 ~ 60	16 ~ 60	16 ~ 60	16 ~ 60
Max. Input Voltage per Input (V)	60	60	60	60	60	60
Short-current(A)	20	20	20	20	20	20
Max. Input Current per Input (A)	14	14	14	16	16	16
Quantity of MPPT	2	2	2	2	2	2
Quantity of DC Inputs	2	2	2	2	2	2
Output [AC]						
Nominal Continous Output Power (W)	600	700	800	800	900	1000
Max Output Current [A]	3	3.19	4	4	4.5	5
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%					
Maximum units per 12AWG branch	12	10	9	9	8	7
Maximum units per 10AWG branch	15	13	12	12	10	9
Efficiency						
Peak Inverter Efficiency	96.7%					
EU Efficiency	96.5%					
Nominal MPPT Efficiency	99.9%					
Night Time Power Consumption	<50 mW					
Mechanical Data						
Dimensions [WxHxD mm]	250 * 223 * 30			261 * 228 * 32		
Weight [kg]	3.1			3.3		
General Data						
Communication	WiFi (Bluetooth)			WiFi (Bluetooth) or RS485		
Cable/Assembling	AC Cable up to 2.43m					
Type of Isolation	HF Isolation					
Type of Enclosure	IP67					
Cooling	Natural convection					
Operating Ambient Temperature Range	-40 ~ +65 °C (derating of over 50°C Ambient Temperature@ PV input 30V)					
Relative Humidity	100%					
Max. Operating Altitude Without Derating [m]	2000					

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

Wiring Diagram (Daisy-chain)



Maximum units per AC branch

MODEL	12AWG	10AWG
MS600	12	15
MS700	10	13
MS800	9	12
MX800	9	12
MX900	8	10
MX1000	7	9

Technical Data (Trunk Cable)

Model	MS600	MS700	MS800	MX800	MX900	MX1000
Input(DC)						
Recommended Module Power (Wp)	300 ~ 550+	300 ~ 550+	300 ~ 550+	300 ~ 600+	300 ~ 600+	300 ~ 600+
Quantity of PV Module	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2
Start up Voltage per Input@Rated condition (V)	22	22	22	22	22	22
MPPT Voltage Range per Input (V)	16 ~ 60	16 ~ 60	16 ~ 60	16 ~ 60	16 ~ 60	16 ~ 60
Max. Input Voltage per Input (V)	60	60	60	60	60	60
Short-current(A)	20	20	20	20	20	20
Max. Input Current per Input (A)	14	14	14	16	16	16
Quantity of MPPT	2	2	2	2	2	2
Quantity of DC Inputs	2	2	2	2	2	2
Output [AC]						
Nominal Continuous Output Power (W)	600	700	800	800	900	1000
Max Output Current [A]	3	3.19	4	4	4.5	5
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%					
Maximum units per 12AWG branch	12	10	9	9	8	7
Maximum units per 10AWG branch	15	13	12	12	10	9

Efficiency

Peak Inverter Efficiency	96.7%
EU Efficiency	96.5%
Nominal MPPT Efficiency	99.9%
Night Time Power Consumption	<50 mW

Mechanical Data

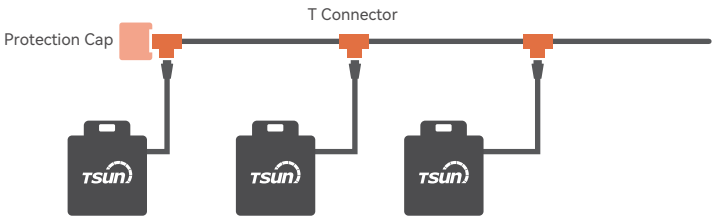
Dimensions [WxHxD mm]	250 * 223 * 30	261 * 228 * 32
Weight [kg]	2.6	2.8

General Data

Communication	WiFi (Bluetooth)	WiFi (Bluetooth) or RS485
Cable/Assembling	AC Cable up to 0.5m with T connector	
Type of Isolation	HF Isolation	
Type of Enclosure	IP67	
Cooling	Natural Convection	
Operating Ambient Temperature Range	-40 ~ +65 °C (derating of over 50°C Ambient Temperature@ PV input 30V)	
Relative Humidity	100%	
Max. Operating Altitude Without Derating [m]	2000	

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

Wiring Diagram (Trunk cable)



Maximum units per AC branch

MODEL	12AWG	10AWG
MS600	12	15
MS700	10	13
MS800	9	12
MX800	9	12
MX900	8	10
MX1000	7	9

Technical Data (Balcony)

Model	MS600	MS700	MS800	MX800	MX900	MX1000
Input(DC)						
Recommended Module Power (Wp)	300 ~ 550+	300 ~ 550+	300 ~ 550+	300 ~ 600+	300 ~ 600+	300 ~ 600+
Quantity of PV Module	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2
Start up Voltage per Input@Rated condition (V)	22	22	22	22	22	22
MPPT Voltage Range per Input (V)	16 ~ 60	16 ~ 60	16 ~ 60	16 ~ 60	16 ~ 60	16 ~ 60
Max. Input Voltage per Input (V)	60	60	60	60	60	60
Short-current(A)	20	20	20	20	20	20
Max. Input Current per Input (A)	14	14	14	16	16	16
Quantity of MPPT	2	2	2	2	2	2
Quantity of DC Inputs	2	2	2	2	2	2
Output [AC]						
Nominal Continuous Output Power (W)	600	700	800	800	900	1000
Max Output Current [A]	3	3.19	4	4	4.5	5
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%					

Efficiency

Peak Inverter Efficiency	96.7%
EU Efficiency	96.5%
Nominal MPPT Efficiency	99.9%
Night Time Power Consumption	<50 mW

Mechanical Data

Dimensions [WxHxD mm]	250 * 223 * 30	261 * 228 * 32
Weight [kg]	2.6	2.8

General Data

Communication	WiFi (Bluetooth)
Cable/Assembling	AC Cable up to 0.5m
Type of Isolation	HF Isolation
Type of Enclosure	IP67
Cooling	Natural Convection
Operating Ambient Temperature Range	-40 ~ +65 °C (derating of over 50°C Ambient Temperature@ PV input 30V)
Relative Humidity	100%
Max. Operating Altitude Without Derating [m]	2000

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

Wiring Diagram(Balcony)

