

GEN3 Microinverter (2-in-1)

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



Daisy Chain



Trunk Cable & Balcony

Maximized Efficiency

Individual optimization, separate 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.

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 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]	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

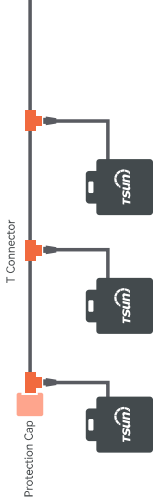
MODEL	12AWG	10AWG
MS600	12	15
MS700	10	13
MS800	9	12
MX800	9	12
MX900	8	10
MX1000	7	9



Technical Data (Trunk Cable)

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

Wiring Diagram (Trunk cable)



Maximum units per AC branch				
MODEL	12AWG	10AWG	12AWG	10AWG
MS600	12	12	15	15
MS700	10	10	13	13
MS800	9	9	12	12
MX800	9	9	12	12
MX900	8	8	10	10
MX1000	7	7	9	9

Technical Data (Balcony)

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

Wiring Diagram(Balcony)

