



GEN3 Microinverter (2-in-1)

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



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 INMETRO RD 1699 G 98

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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 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

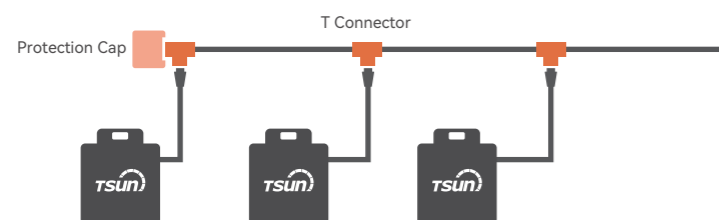
| MODEL | 12AWG | 10AWG |
|--------|-------|-------|
| MS600 | 12 | 15 |
| MS700 | 10 | 13 |
| MS800 | 9 | 12 |
| MX800 | 9 | 12 |
| MX900 | 8 | 10 |
| MX1000 | 7 | 9 |

Technical Data (Trunk Cable)

| 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)

