

SG300 Series

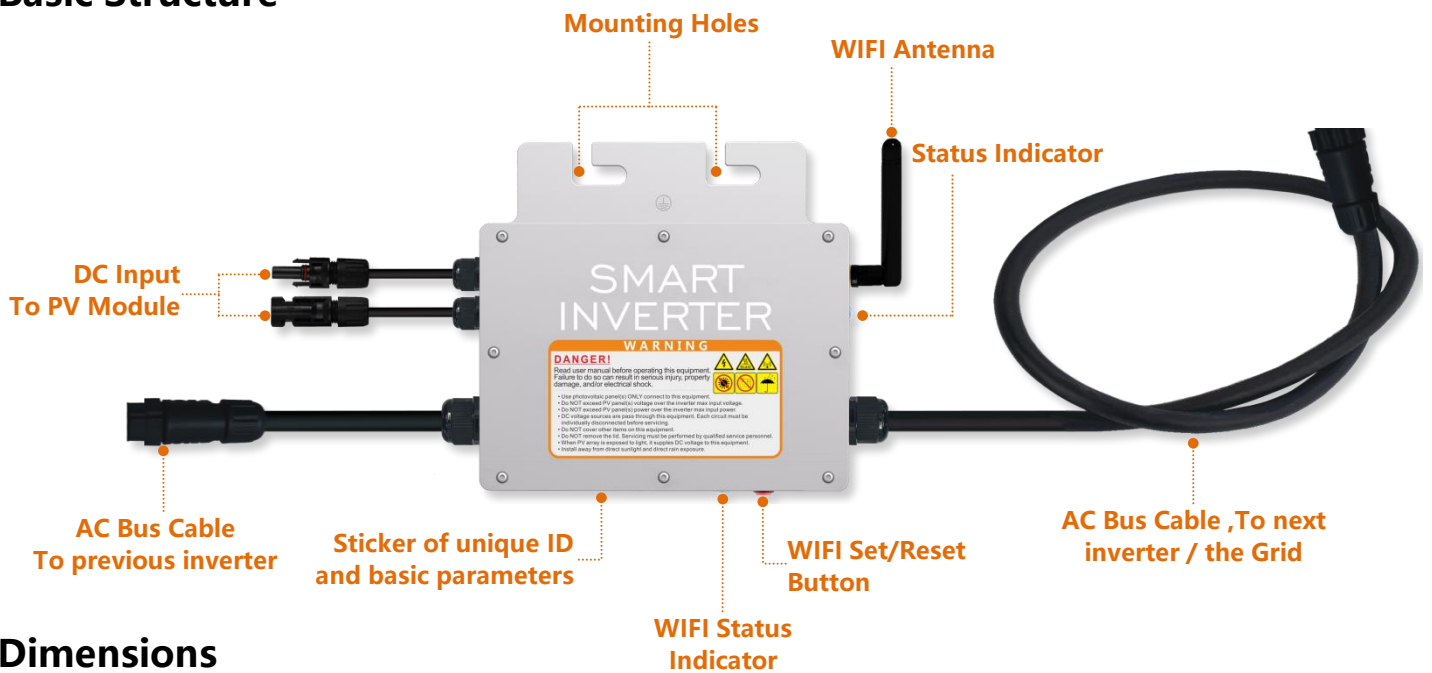
PV Smart Microinverter

SG300 Series

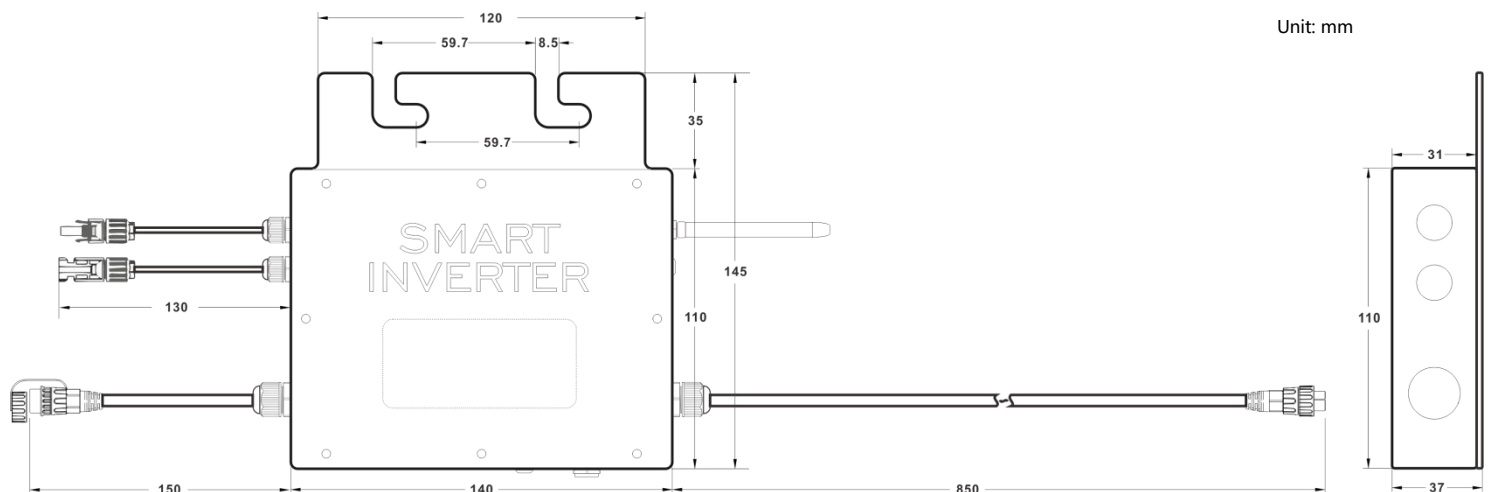


- Single unit connects to one PV module
- Maximum 300W AC output power
- Single-phase output, Flexible 3-phase PV systems
- WIFI communication and cloud monitoring
- Up to 16 units (230V) per branch
- Customizable various input (DC, PV) voltage range
- Integrated AC bus cable, Ready-To-Use
- Low cost, Easy installation

Basic Structure



Dimensions



SG300 Series PV Smart Microinverter - Parameter Table

| | |
|-------------------------------------|--|
| Product Series | SG300 Series |
| Model | SG300MS (Regular) |
| Input Data(DC,PV) | |
| Number of Input MC4 Connector | 1 set |
| MPPT Voltage Range | 28V-55V |
| Operation Voltage Range | 20V-60V |
| Maximum Input Voltage | 60V |
| Startup Voltage | 20V |
| Maximum Input Power | 300W |
| Maximum Input Current | 10A |
| Output Data(AC) | |
| Single-Phase Grid Type | 120V / 230V |
| Rated Output Power | 295W |
| Maximum Output Power | 300W |
| Nominal Output Current | @120VAC : 2.5A / @230VAC : 1.3A |
| Nominal Output Voltage | 120VAC / 230VAC |
| Default Output Voltage Range | @120VAC : 80V-160V / @230VAC : 180V-280V |
| Nominal Output Frequency | 50Hz & 60Hz |
| Default Output Frequency Range | @50Hz : 47.5Hz-52.5Hz & @60Hz : 57.5Hz-62.5Hz |
| Power Factor | >0.99 |
| Total Harmonic Distortion | THD <5% |
| Maximum Units per Branch | @120VAC : 8 units / @230VAC : 16 units |
| Efficiency | |
| Peak Efficiency | 95% |
| CEC Weighted Efficiency | @120VAC : 92.5% / @230VAC : 93.5% |
| Nominal MPPT Efficiency | 99.9% |
| Night Power Consumption | <700mW |
| Mechanical Data | |
| Operating Ambient Temperature Range | -40°C to +65°C |
| Storage Temperature Range | -40°C to +85°C |
| Dimensions (W x H x D) | 145mm x 140mm x 37mm (not include connectors and cable) |
| Weight | 0.8kg |
| Max Current of AC Bus Cable | 20A |
| Waterproof Grade | IP65 |
| Cooling Mode | Natural Convection - No Fans |
| Other Features | |
| Communication | WIFI (Cloud monitoring) |
| Transformer Design | High Frequency Transformers, Galvanically Isolated |
| Integrated Ground | Equipment ground is provided by the PE in the AC cable. No additional ground is required. |
| Protection Functions | Isolated Island Protection, Voltage Protection, Frequency Protection, Temperature Protection, Current Protection, etc. |
| Design Compliance | CE etc. |

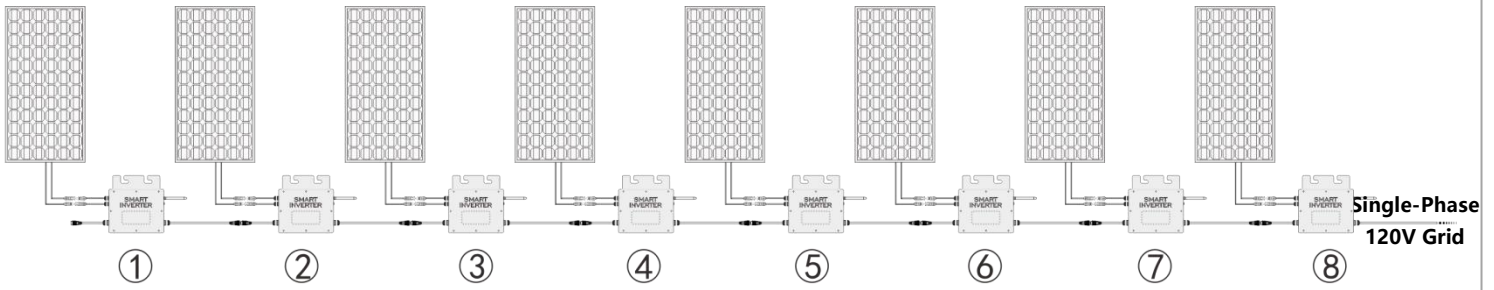
**** Specifications subject to change without notice****

Installation Schematic

SG300-120VAC Microinverter

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Single-Phase 120V

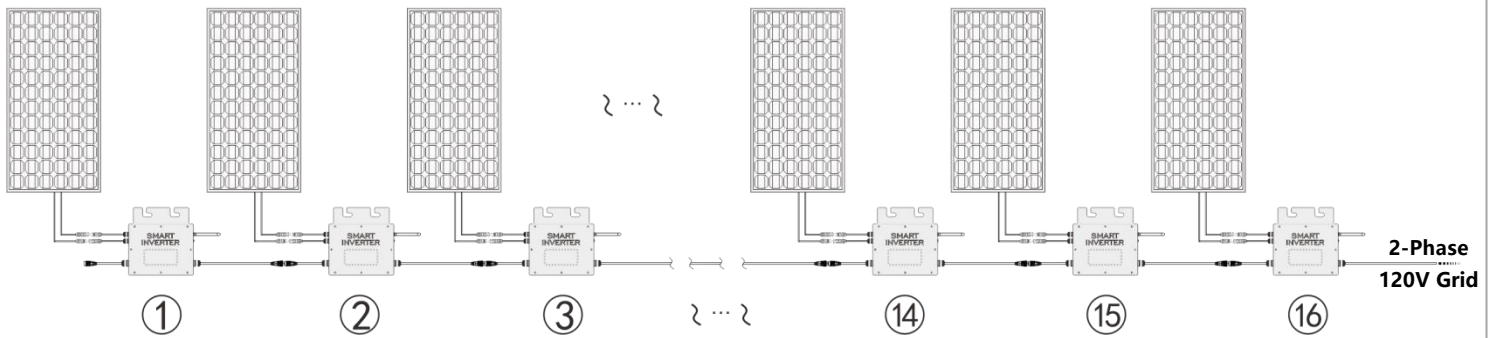


1. SG300-120VAC @Single-Phase 120V grid, Maximum **8** units SG300 Microinverters per branch.
2. The max DC input power of each inverter is **300W** (the PV module max output power is 300W).
3. The **VOC** of PV modules should not be greater than the max DC input voltage of Microinverters.

SG300-230VAC Microinverter

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2-Phase 208/240V(Single-Phase 120V)

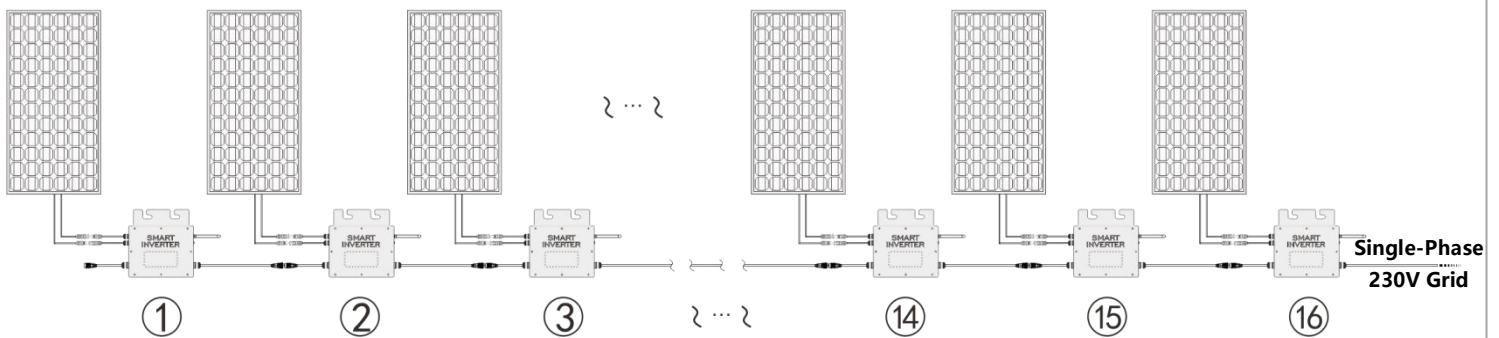


1. SG300-230VAC @2-Phase 208/240V grid, Maximum **16** units SG300 Microinverters per branch.
2. The max DC input power of each inverter is **300W** (the PV module max output power is 300W).
3. The **VOC** of PV modules should not be greater than the max DC input voltage of Microinverters.

SG300-230VAC Microinverter

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Single-Phase 230V



1. SG300-230VAC @Single-Phase 230V grid, Maximum **16** units SG300 Microinverters per branch.
2. The max DC input power of each inverter is **300W** (the PV module max output power is 300W).
3. The **VOC** of PV modules should not be greater than the max DC input voltage of Microinverters.

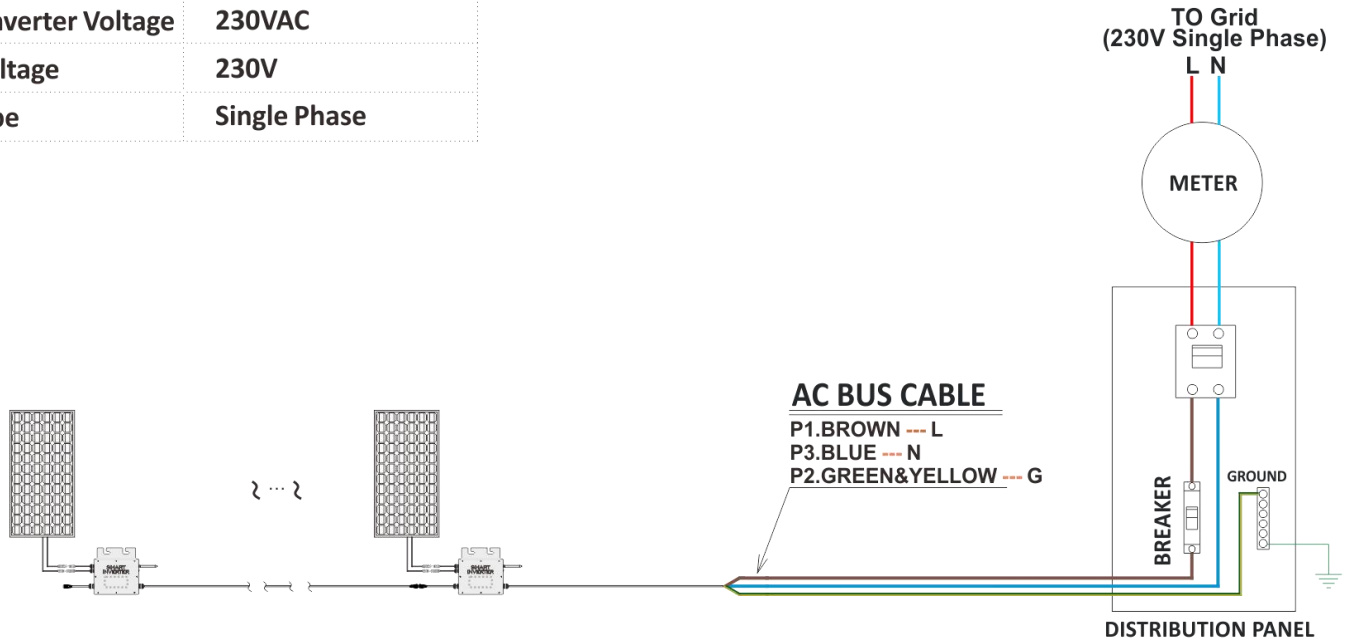
Wiring Schematic

SG300-230VAC Microinverter

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Single-Phase 230V

| | |
|------------------------|--------------|
| Micro Inverter Voltage | 230VAC |
| Grid Voltage | 230V |
| Grid Type | Single Phase |

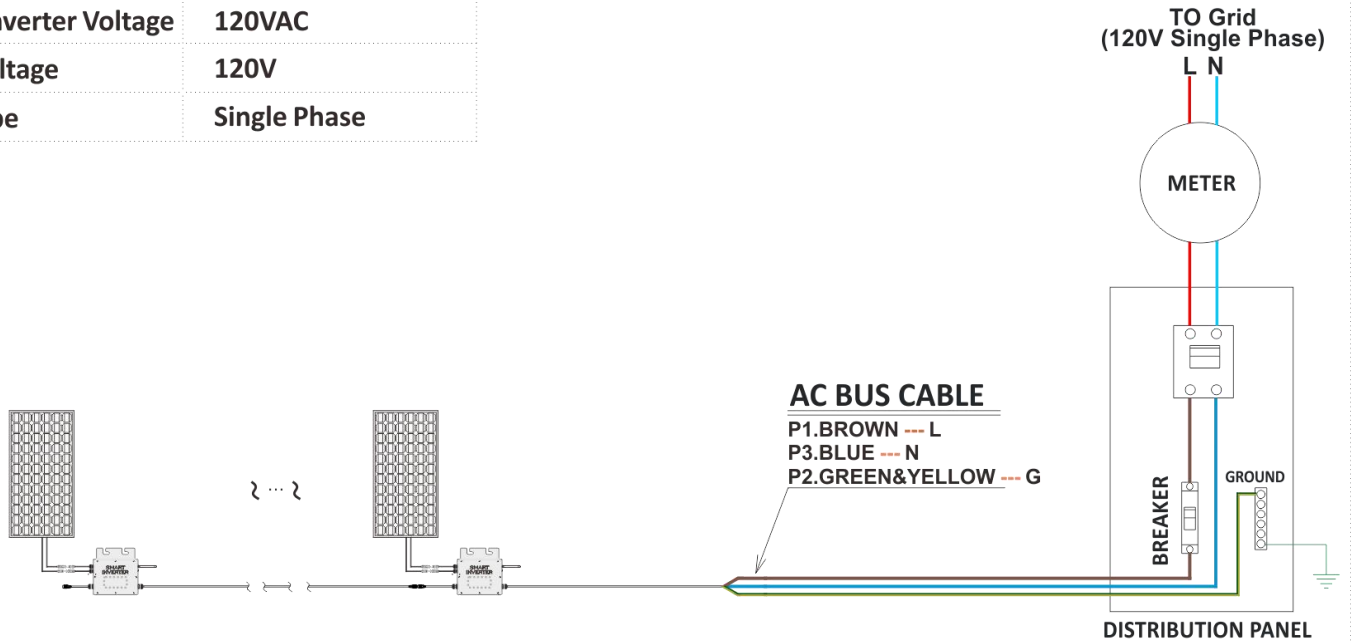


SG300-120VAC Microinverter

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Single-Phase 120V

| | |
|------------------------|--------------|
| Micro Inverter Voltage | 120VAC |
| Grid Voltage | 120V |
| Grid Type | Single Phase |

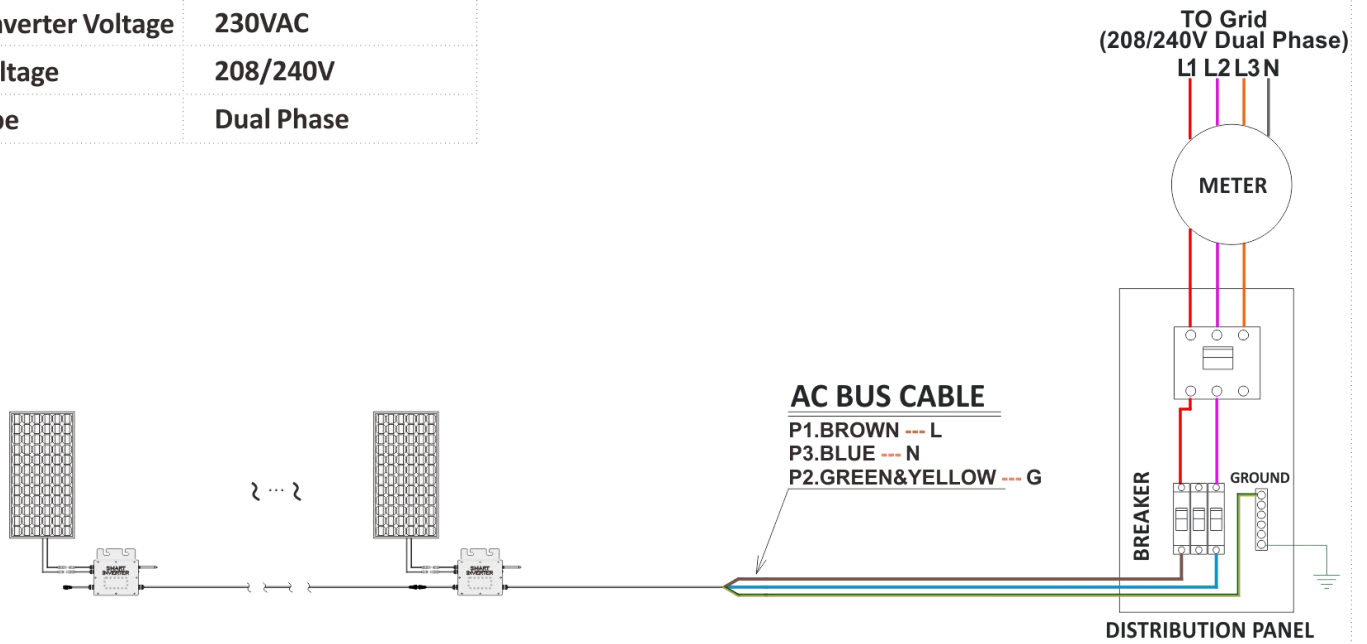


SG300-230VAC Microinverter

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2-Phase 208/240V(Single-Phase 120V)

| | |
|------------------------|------------|
| Micro Inverter Voltage | 230VAC |
| Grid Voltage | 208/240V |
| Grid Type | Dual Phase |

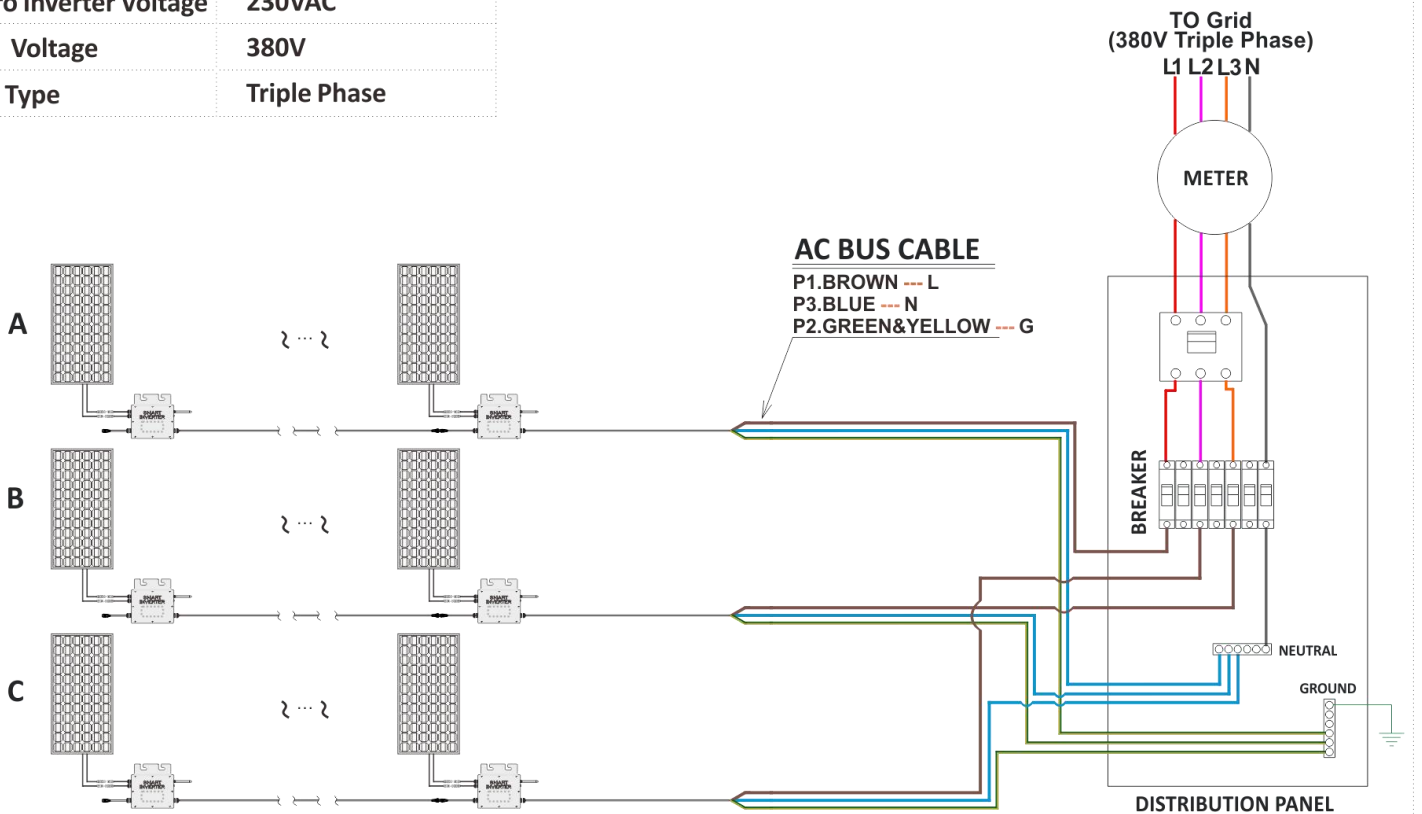


SG300-230VAC Microinverter

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3-Phase 380V(Single-Phase 230V)

| | |
|------------------------|--------------|
| Micro Inverter Voltage | 230VAC |
| Grid Voltage | 380V |
| Grid Type | Triple Phase |

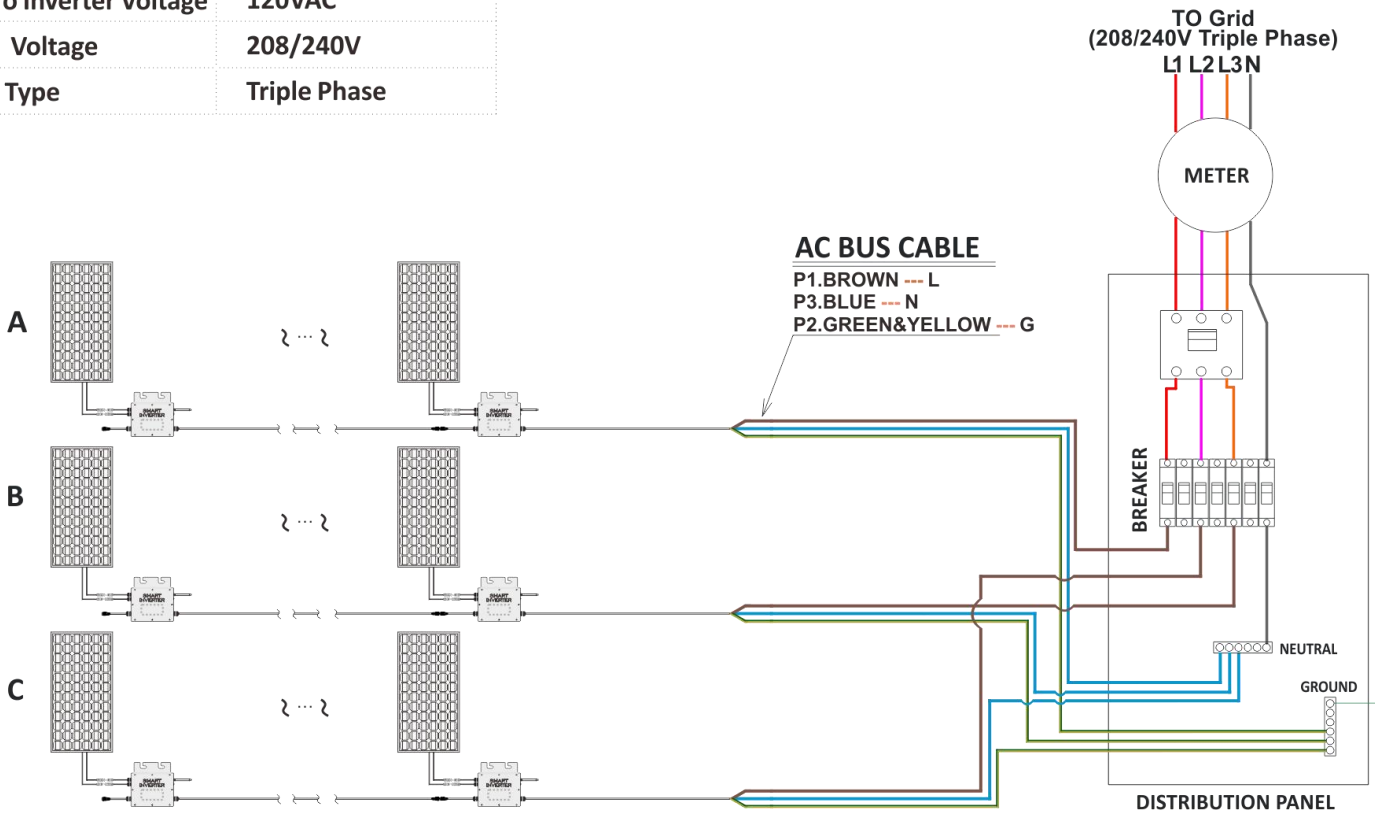


SG300-120VAC Microinverter

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3-Phase 208/240V(Single-Phase 120V)

| | |
|------------------------|--------------|
| Micro Inverter Voltage | 120VAC |
| Grid Voltage | 208/240V |
| Grid Type | Triple Phase |



SG300-230VAC Microinverter

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3-Phase 208/240V(Single-Phase 120V)

| | |
|------------------------|--------------|
| Micro Inverter Voltage | 230VAC |
| Grid Voltage | 208/240V |
| Grid Type | Triple Phase |

