

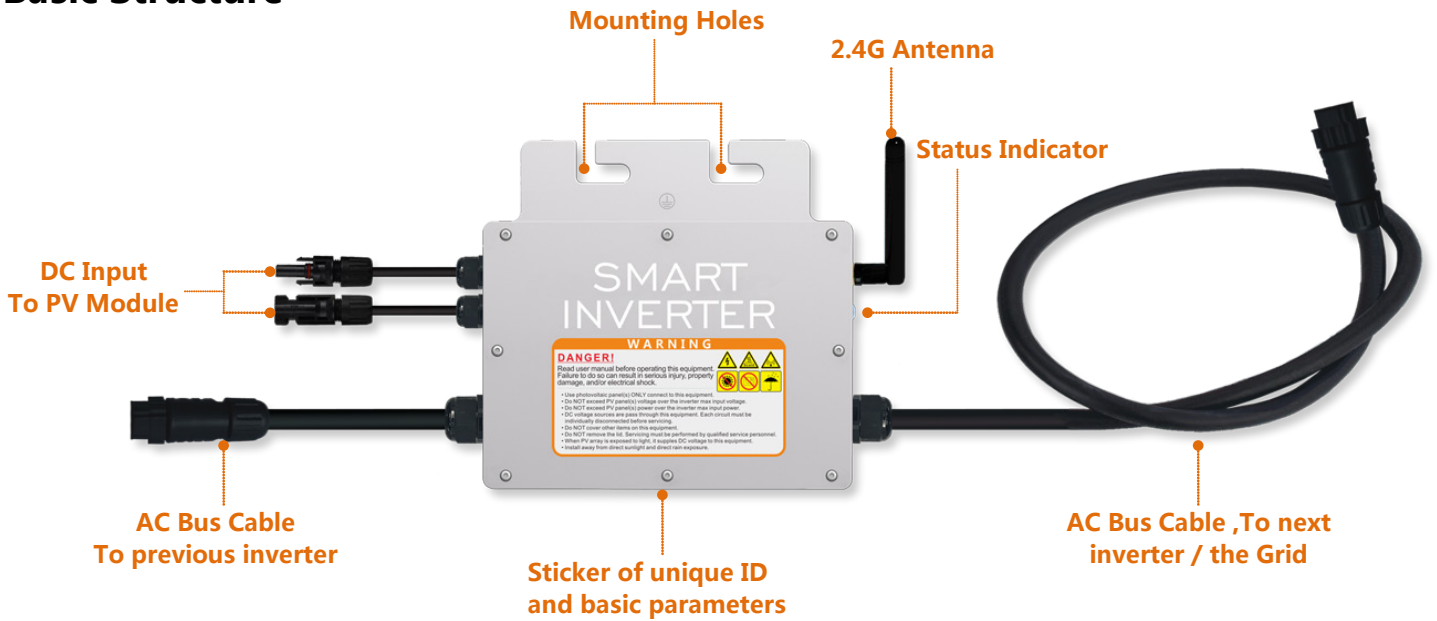
SG250 Series

PV Smart Microinverter

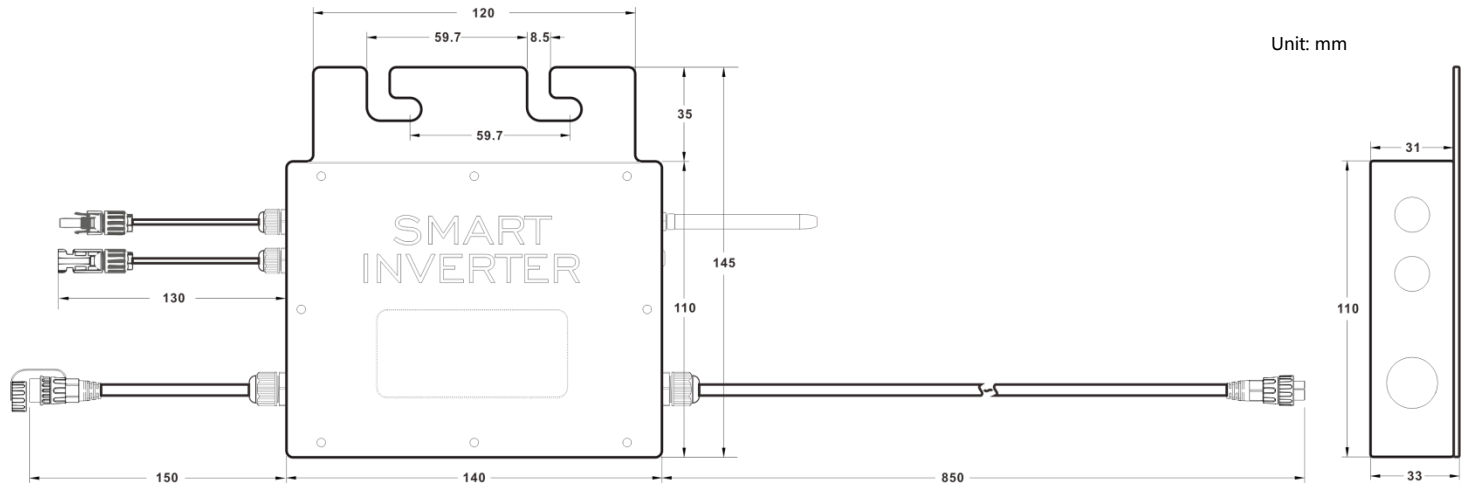
SG250 Series

- Single unit connects to one PV module
- Maximum 250W AC output power
- Single-phase output, Flexible 3-phase PV systems
- 2.4G wireless communication and monitoring
- Up to 18 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



SG250 Series PV Smart Microinverter - Parameter Table

Product Series	SG250 Series			
Model	SG250MS (Regular)	SG250LS (Custom-made)	SG250HS (Custom-made)	SG250TS (Custom-made)
Input Data(DC,PV)				
Number of Input MC4 Connector	1 set	1 set	1 set	1 set
MPPT Voltage Range	24V-40V	14V-24V	36V-60V	80V-115V
Operation Voltage Range	18V-50V	10V-30V	30V-70V	70V-120V
Maximum Input Voltage	50V	30V	70V	120V
Startup Voltage	18V	10V	30V	70V
Maximum Input Power	250W	250W	250W	250W
Maximum Input Current	10A	16.6A	6.9A	3.1A
Output Data(AC)				
Single-Phase Grid Type	120V / 230V			
Rated Output Power	245W			
Maximum Output Power	250W			
Nominal Output Current	@120VAC : 2.08A / @230VAC : 1.08A			
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 : 9 units / @230VAC : 18 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 33mm (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(Inverter to DataBox)	2.4G Wireless			
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	NB/T32004:2013,NB/T32004:2013,EN61000-3-2,EN62109,VDE0126,UL1741 etc.			

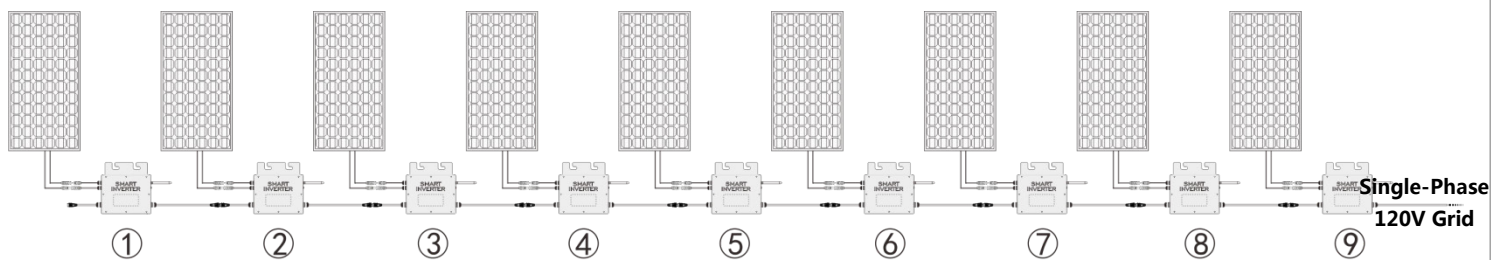
**** Specifications subject to change without notice****

Installation Schematic

SG250-120VAC Microinverter

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Single-Phase 120V

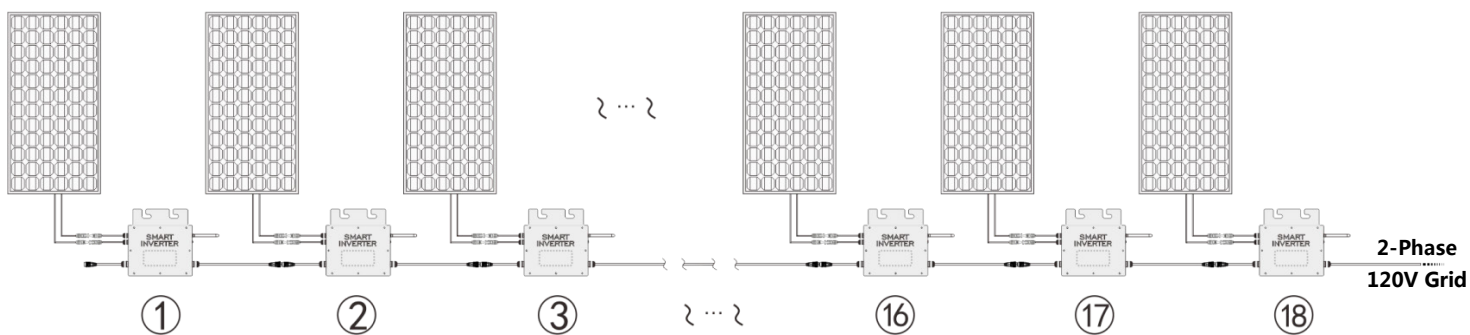


1. SG250-120VAC @Single-Phase 120V grid, Maximum **9** units SG250 Microinverters per branch.
2. The max DC input power of each inverter is **250W** (the PV module max output power is 250W).
3. The **VOC** of PV modules should not be greater than the max DC input voltage of Microinverters.

SG250-230VAC Microinverter

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

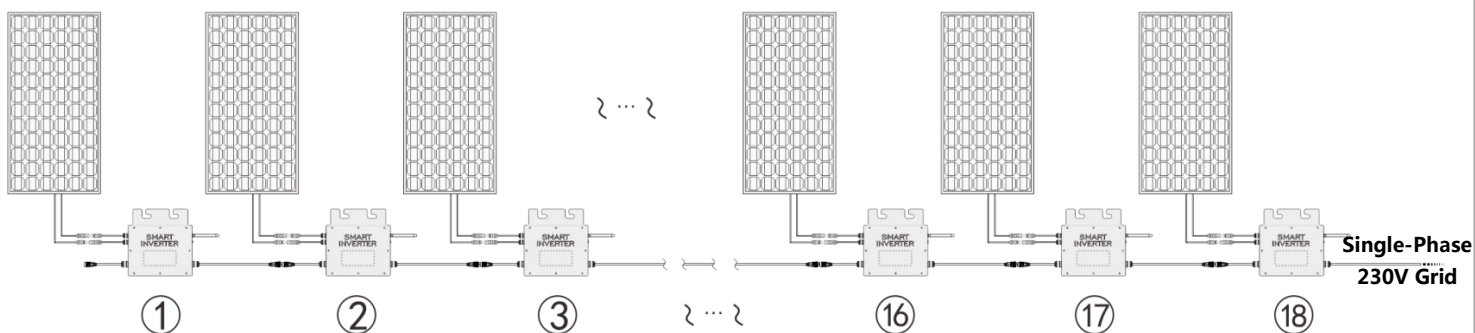


1. SG250-230VAC @2-Phase 208/240V grid, Maximum **18** units SG250 Microinverters per branch.
2. The max DC input power of each inverter is **250W** (the PV module max output power is 250W).
3. The **VOC** of PV modules should not be greater than the max DC input voltage of Microinverters.

SG250-230VAC Microinverter

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Single-Phase 230V



1. SG250-230VAC @Single-Phase 230V grid, Maximum **18** units SG250 Microinverters per branch.
2. The max DC input power of each inverter is **250W** (the PV module max output power is 250W).
3. The **VOC** of PV modules should not be greater than the max DC input voltage of Microinverters.

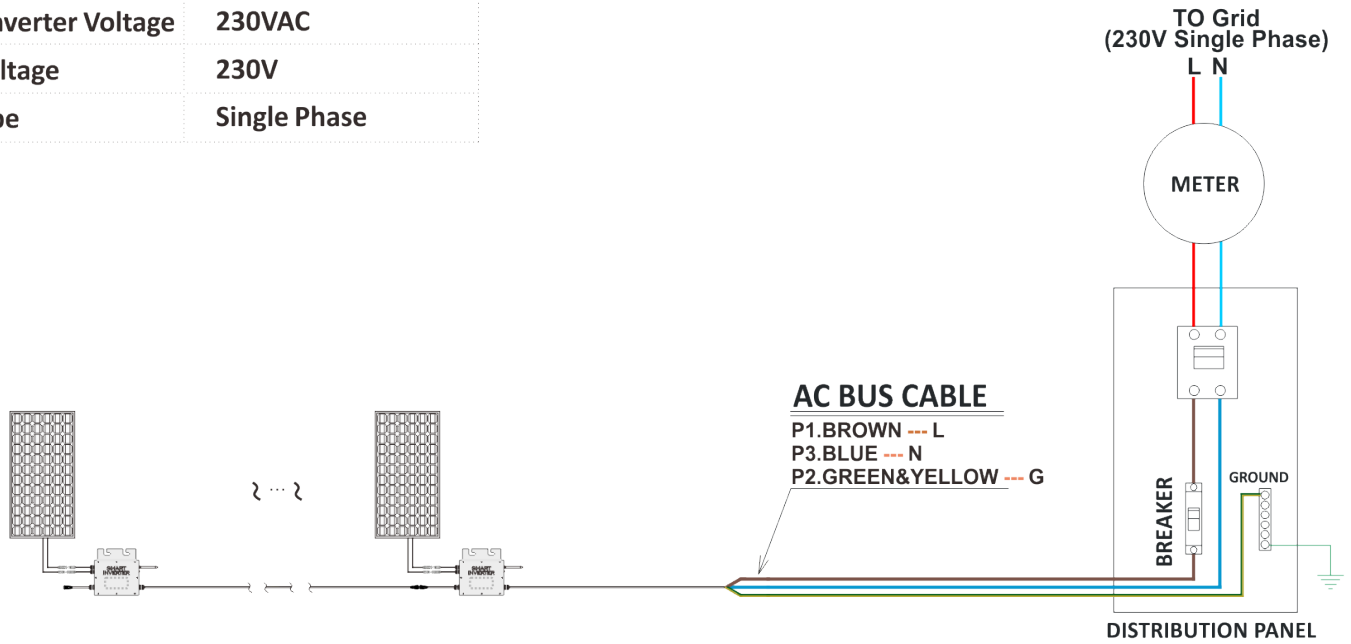
Wiring Schematic

SG250-230VAC Microinverter

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Single-Phase 230V

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

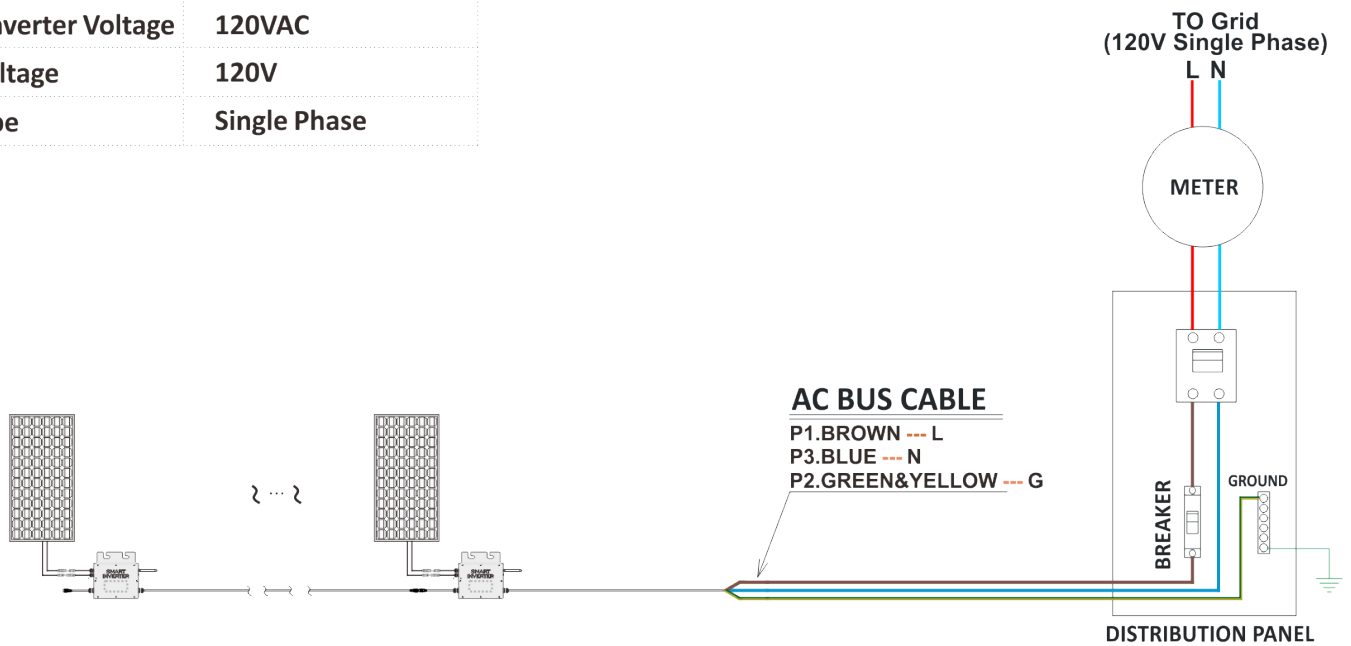


SG250-120VAC Microinverter

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Single-Phase 120V

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

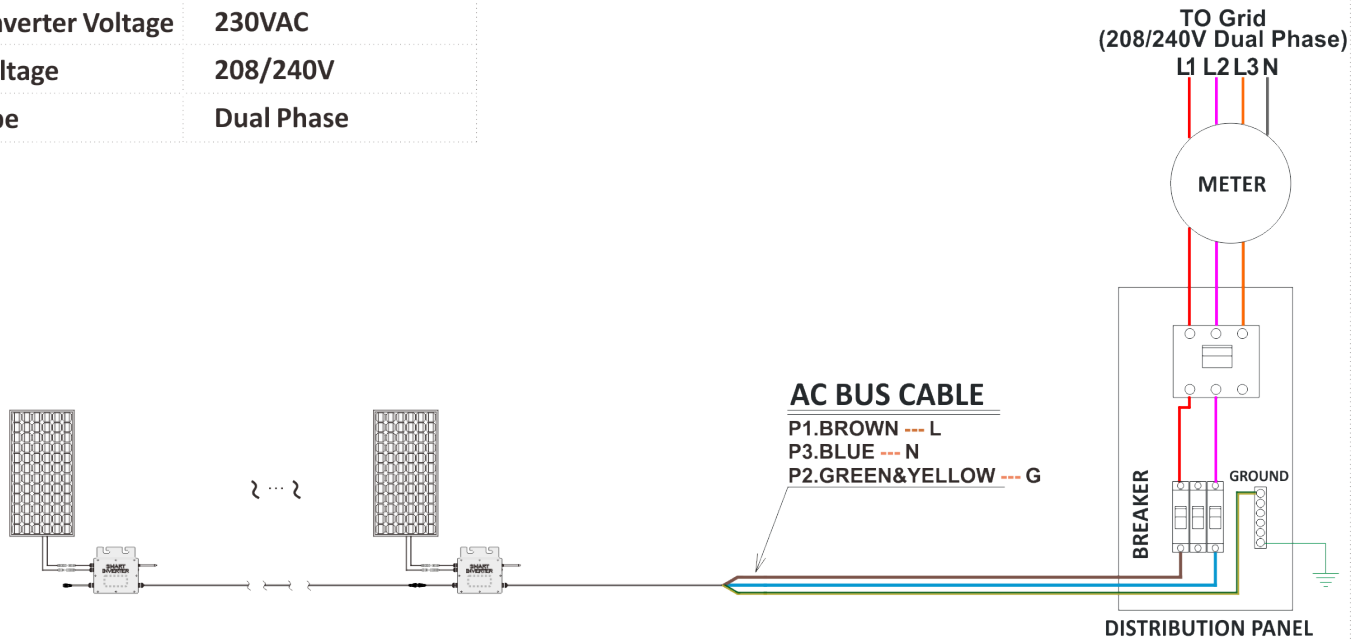


SG250-230VAC Microinverter

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

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

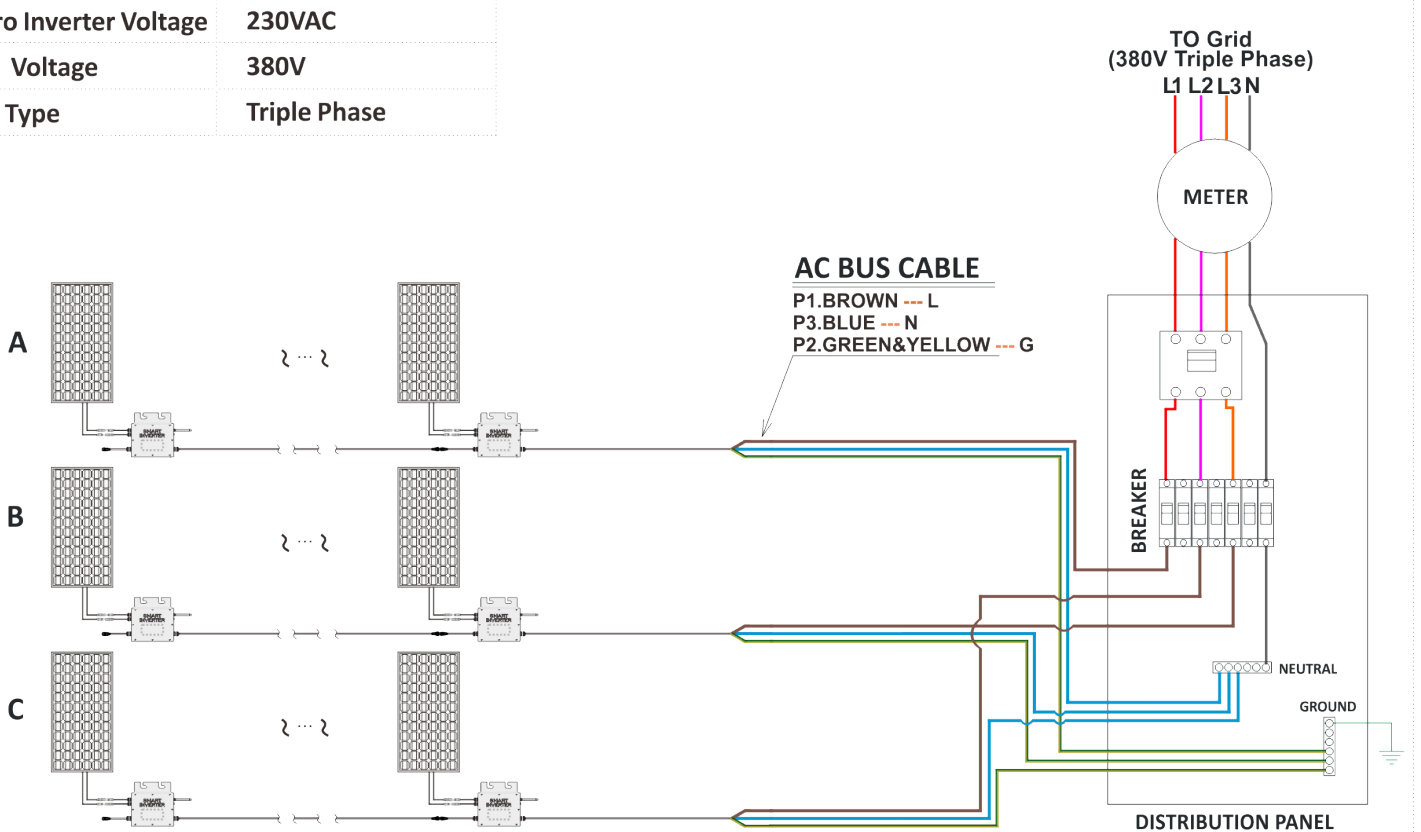


SG250-230VAC Microinverter

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

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

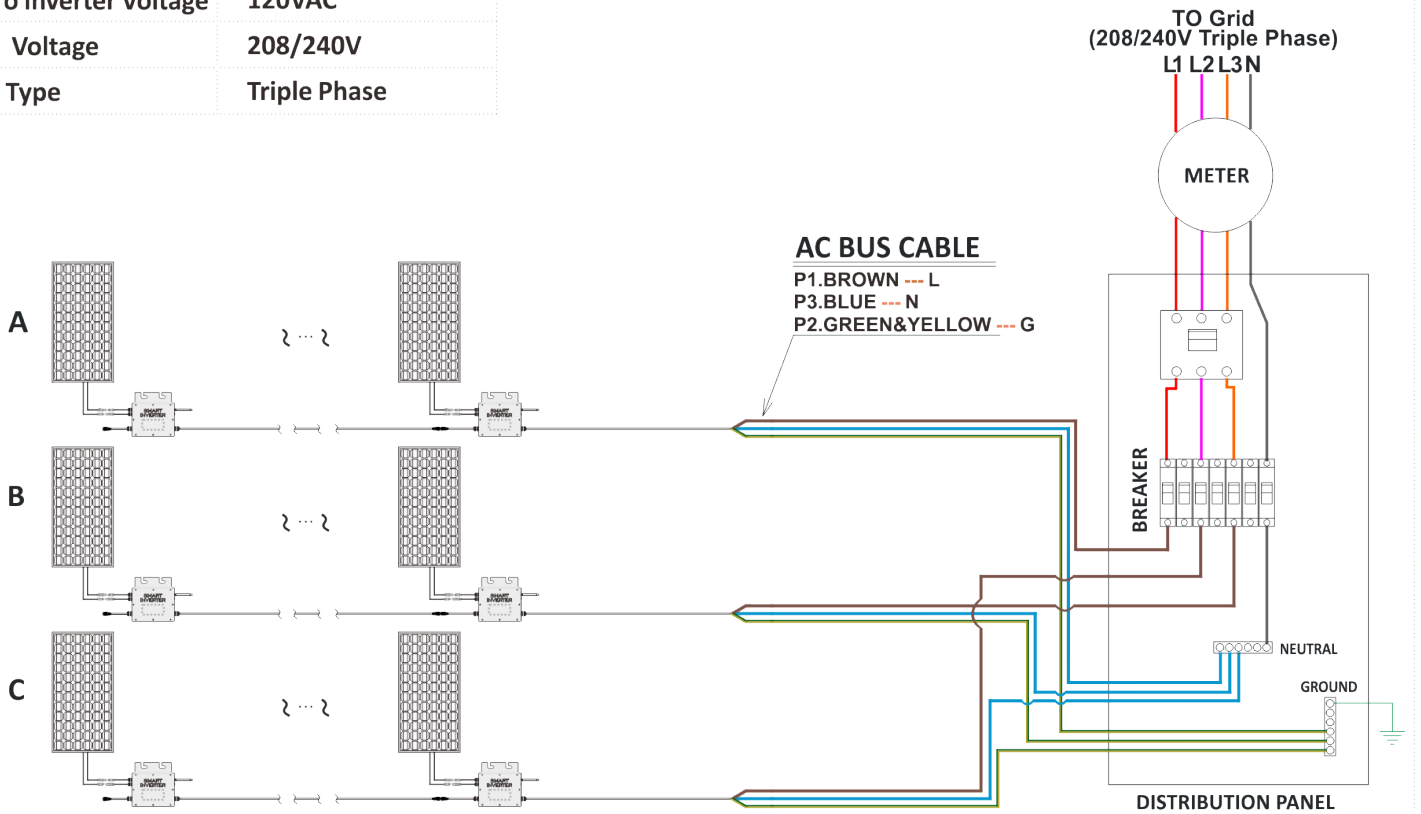


SG250-120VAC Microinverter

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

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



SG250-230VAC Microinverter

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

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

