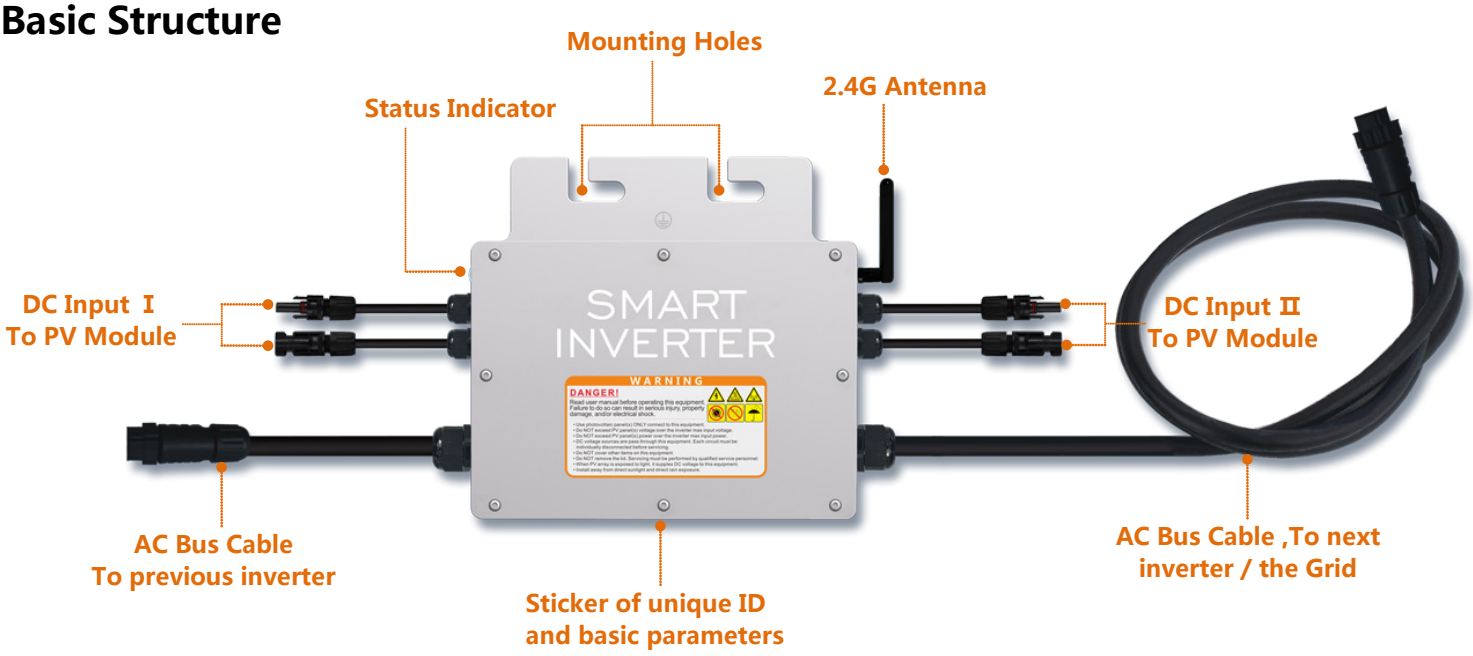
SG700 Series

PV Smart Microinverter

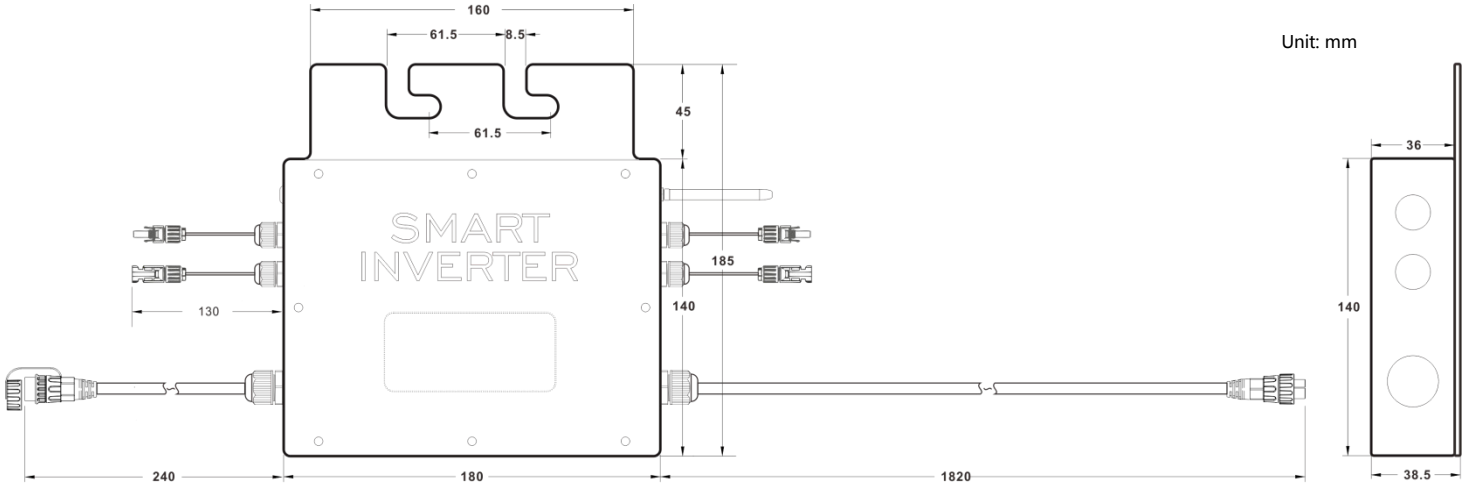
SG700 Series

- Single unit connects up to two PV modules
- Maximum 700W AC output power
- Single-phase output, Flexible 3-phase PV systems
- 2.4G wireless communication and monitoring
- Up to 7 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



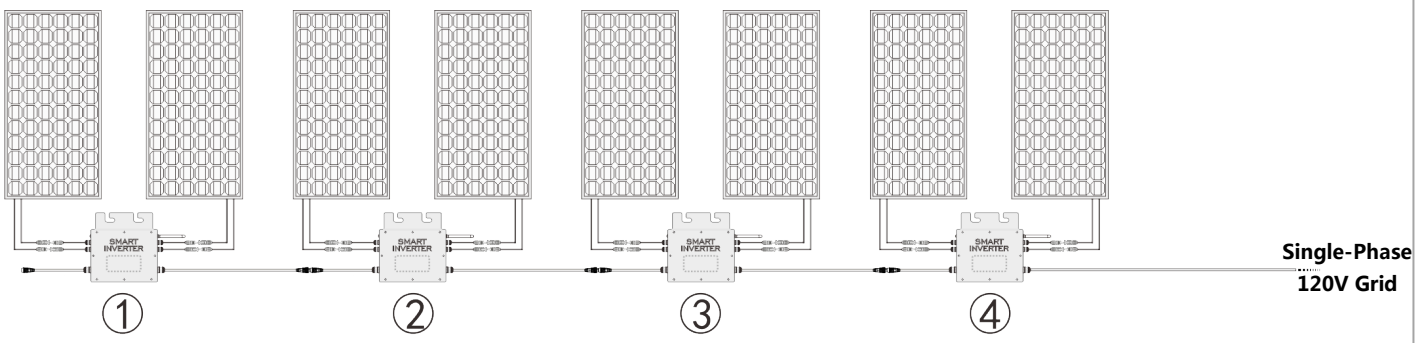
SG700 Series PV Smart Microinverter - Parameter Table

Product Series	SG700 Series		
Model	**SG700MD** (Regular)	**SG700HD** (Custom-made)	**SG700TD** (Custom-made)
Input Data(DC,PV)			
Number of Input MC4 Connector	2 set	2 set	2 set
MPPT Voltage Range	24V-40V	36V-60V	80V-115V
Operation Voltage Range	18V-50V	30V-70V	70V-120V
Maximum Input Voltage	50V	70V	120V
Startup Voltage	18V	30V	70V
Maximum Input Power	2*350W	2*350W	2*350W
Maximum Input Current	2*14A	2*9.7A	2*4.3A
Output Data(AC)			
Single-Phase Grid Type	120V & 230V		
Rated Output Power	650W		
Maximum Output Power	700W		
Nominal Output Current	@120VAC : 5.4A / @230VAC : 2.8A		
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 : 4 units / @230VAC : 7 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)	185mm x 180mm x 38.5mm (not include connectors and cable)		
Weight	1.5kg		
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****

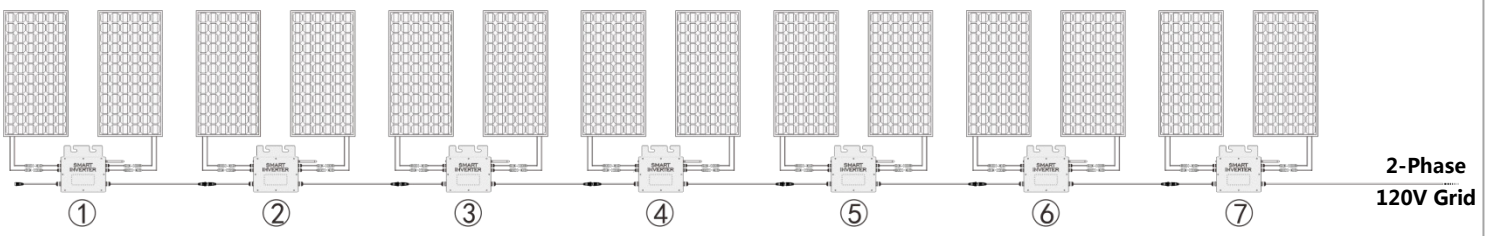
Installation Schematic

SG700 Series Microinverter @ Single-Phase 120V



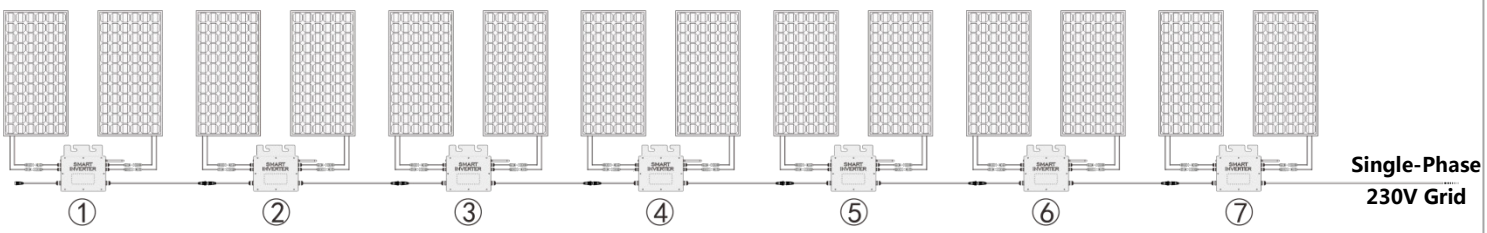
1. SG700 Series @Single-Phase 120V grid, Maximum 4 units SG700 Microinverters per branch.
2. The max DC input power of each inverter is 700W (the PV module max output power is 2*350W).
3. The VOC of PV modules should not be greater than the max DC input voltage of Microinverters.

SG700 Series Microinverter @ 2-Phase 208/240V(Single-Phase 120V)



1. SG700 Series @2-Phase 208/240V grid, Maximum 7 units SG700 Microinverters per branch.
2. The max DC input power of each inverter is 700W (the PV module max output power is 2*350W).
3. The VOC of PV modules should not be greater than the max DC input voltage of Microinverters.

SG700 Series Microinverter @ Single-Phase 230V

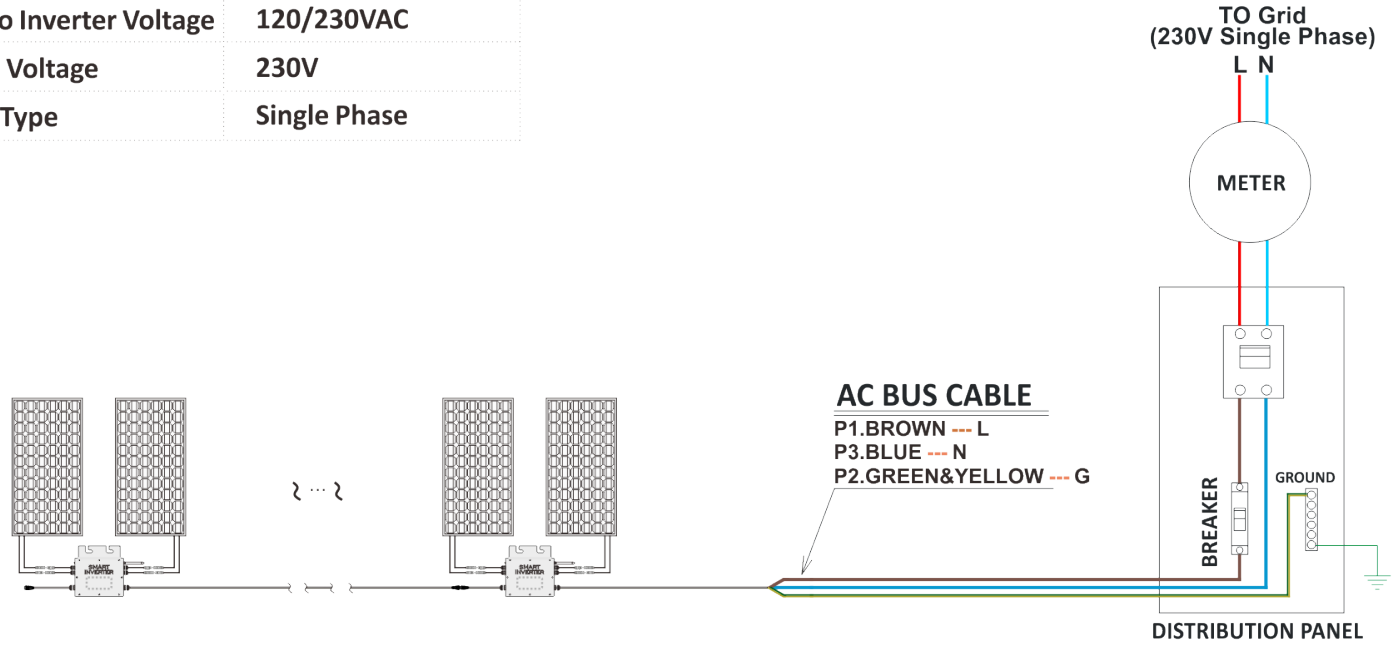


1. SG700 Series @Single-Phase 230V grid, Maximum 7 units SG700 Microinverters per branch.
2. The max DC input power of each inverter is 700W (the PV module max output power is 2*350W).
3. The VOC of PV modules should not be greater than the max DC input voltage of Microinverters.

Wiring Schematic

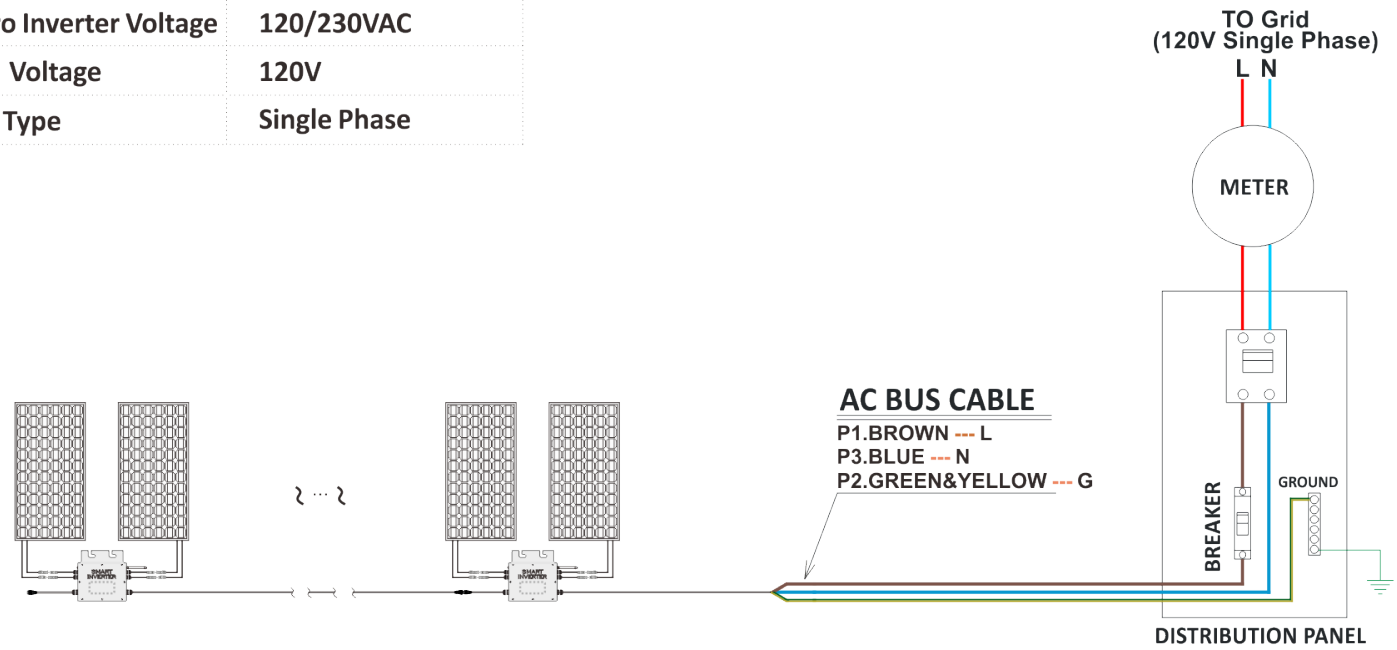
SG700 Series Microinverter @ Single-Phase 230V

Micro Inverter Voltage	120/230VAC
Grid Voltage	230V
Grid Type	Single Phase



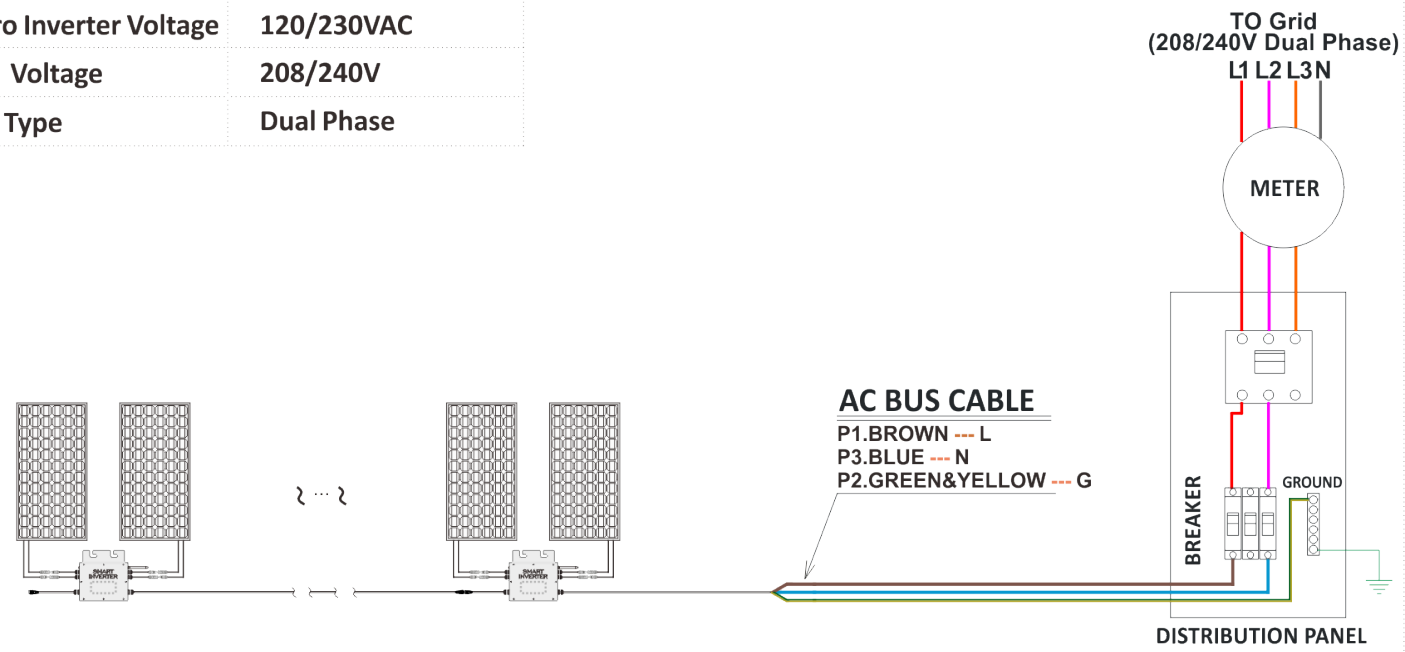
SG700 Series Microinverter @ Single-Phase 120V

Micro Inverter Voltage	120/230VAC
Grid Voltage	120V
Grid Type	Single Phase



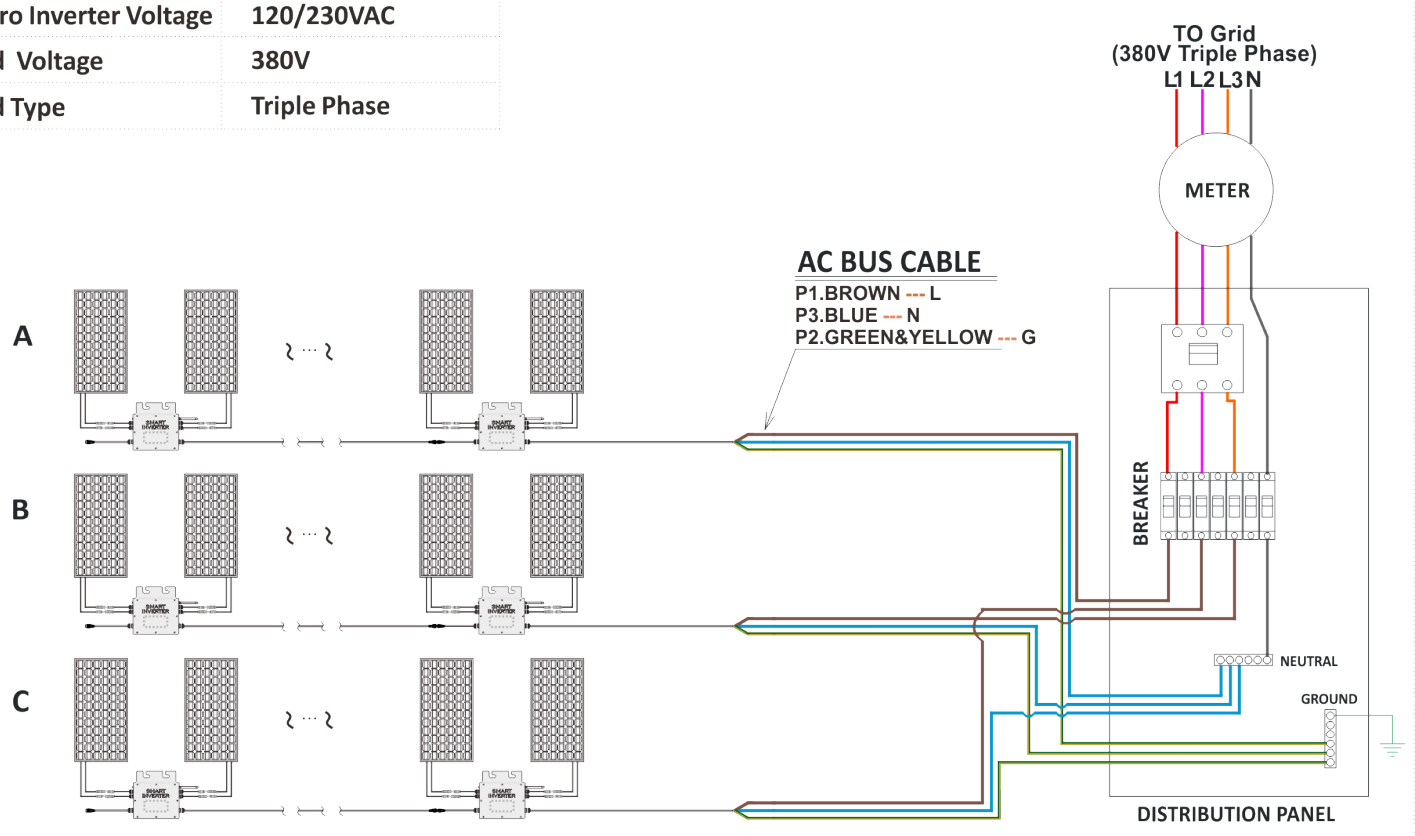
SG700 Series Microinverter @ 2-Phase 208/240V(Single-Phase 120V)

Micro Inverter Voltage	120/230VAC
Grid Voltage	208/240V
Grid Type	Dual Phase



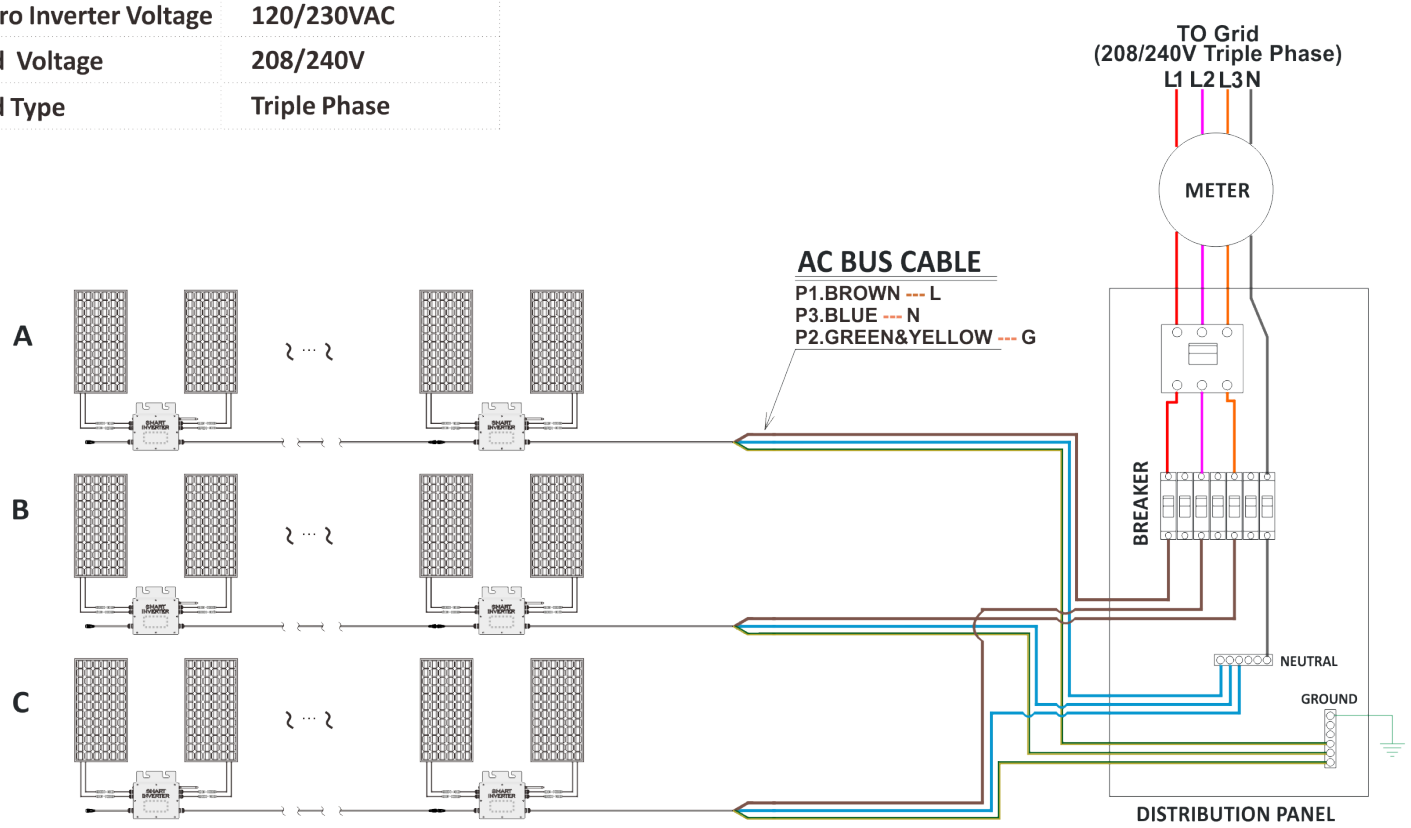
SG700 Series Microinverter @ 3-Phase 380V(Single-Phase 230V)

Micro Inverter Voltage	120/230VAC
Grid Voltage	380V
Grid Type	Triple Phase



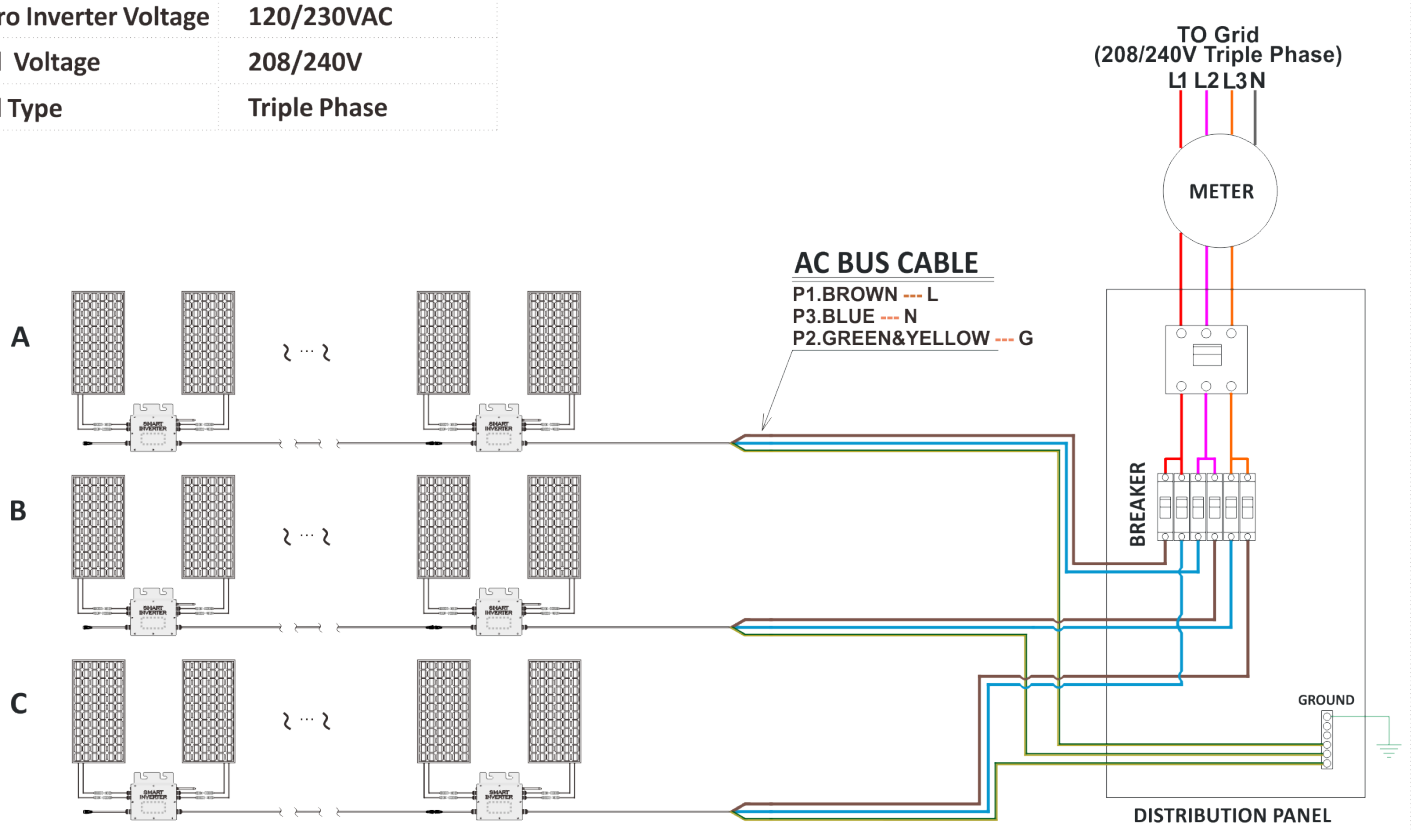
SG700 Series Microinverter @ 3-Phase 208/240V(Single-Phase 120V) I

Micro Inverter Voltage	120/230VAC
Grid Voltage	208/240V
Grid Type	Triple Phase



SG700 Series Microinverter @ 3-Phase 208/240V(Single-Phase 120V) II

Micro Inverter Voltage	120/230VAC
Grid Voltage	208/240V
Grid Type	Triple Phase



V: 1.8 2019-06-29