



# IGSM-300

## PV Micro-inverter



### Features

- Individual MPPT to maximize harvesting
- Maximum efficiency up to 95%
- Up to 25% more energy generated versus traditional inverter
- HF Isolation
- Low DC voltage - Safe and no fire hazard
- Comprehensive protection against :
  - High input voltage
  - Low input voltage
  - Utility grid low voltage
  - Utility grid high voltage
  - Utility grid high current
  - Micro-inverter over temperature
  - Utility grid frequency abnormal
  - Anti-Islanding protection
- Natural convection cooling
- Comprehensive remote monitoring
- Easy installation planning
- 15 years warranty
- Simple and lower cost of installation

### Description

The InfluxGreen IGSM-300 Micro-inverter is a grid connected device incorporating advanced digital control technology to convert DC to AC. It facilitates the easy setup of a distributed solar system.

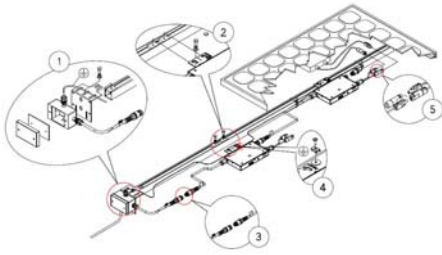
Combined with the user friendly web-based monitoring gateway, the integrated system maximizes energy harvest and simplifies the overall design, installation and the management system.

Each InfluxGreen micro-inverter works independently with a single PV module, providing individual Maximum Peak Power Tracking (MPPT) and ensures that the maximum power is exported to the utility grid regardless of the performance of the other PV modules in the array.

It is common that the PV arrays often subject to shading, soiling, orientation or panel mismatch and causes major reduction of energy harvest and affecting return on investment.

The self-protection functions provide stability and reliability of the PV system. The micro-inverter used advance potting technology achieving IP65 protection degree.





## Technical Specifications

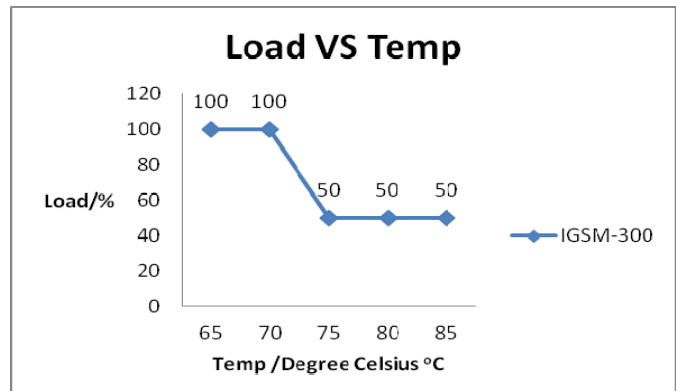
DC Input	
Max DC Power	300W
Start Voltage Range	30 to 50 VDC
Maximum Voltage	55 VDC
MPPT Voltage Range	30 to 42 VDC
Max. Input DC current	12A

AC Output	
Output Power	270W
Output Power Factor	0.99
Nominal AC voltage / Range	230VAC / (205 to 253 VAC)
Max Output Current	1400 mA
Nominal Frequency / Range	50 Hz / (49.5 to 50.5 Hz)
Peak Efficiency	95%
European Efficiency	94%
Nominal MPP Tracking	99%
THDi (Current Distortion)	<2%

Operating Environment	
Operating Temperature	-40 to + 70 °C
Storage Temperature	-40 to + 80 °C
Relative Humidity	0 to 100 %
Altitude	<2000m (without power de-rating)
Night Power Consumption	<20mW

Mechanical	
Dimension (LxWxH)	228mm*136mm*33.7mm
Weight	2.5kg
Enclosure Protection Rating	IP65
Protective Class	Class I

Other Parameters	
Max. Units Per Branch	11
AC Over voltage category	Category III
DC Over voltage category	Category II
Cooling	Natural Convection
AC cable	UL2733#14AWG
DC cable	2.5mm <sup>2</sup> UL1169#14AWG
Communication	Power line Communication
grounding protection	Refer to VDE0126
Warranty	15 years
PV Modules Compatibility	Pairs with most 72-cell PV modules
Compliance Safety	CE / EN62109-1 / AS3100
EMC Compliance	EN61000-6-3, EN61000-6-1
Grid Connection Compliance	VDE0126-1 / AS4777.2 / AS4777.3



All technical specifications contained within this document are subject to change without prior notice

2012 ver 1.01