



## Features:

- ▶ Max. efficiency: 96.44%, MPPT efficiency: >99.9%
- ▶ Built-in zero export device
- ▶ Low startup voltage “45V”
- ▶ Anti-islanding protection
- ▶ IP65 protection
- ▶ Wide MPPT range
- ▶ In-house remote monitoring application “SELEC<sup>®</sup> SOLAR”

Certification: BIS | BEE | IEC

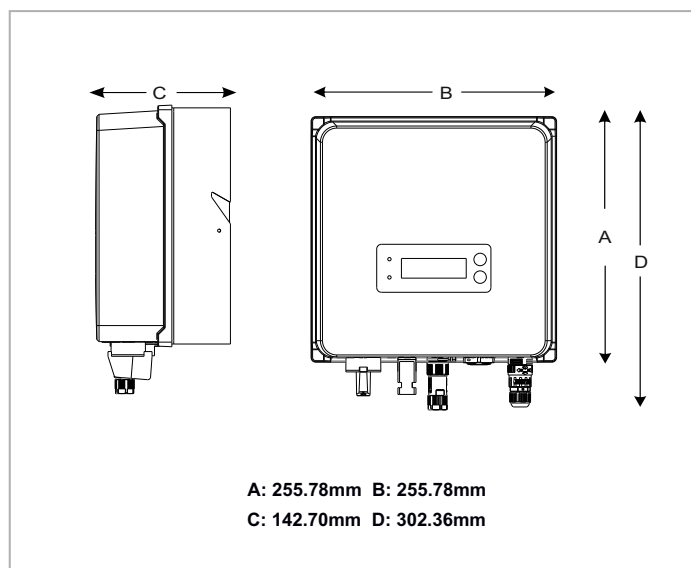


## Technical specifications

Main	
Product name	GTI002X51PN243-X
Product or component type	Grid tie inverter
Input specification	
DC input (PV side)	
Nominal DC input power (kW)	2.5
Max. allowable PV power (kW)	3.75
Nominal PV voltage (V)	360
Max. DC input voltage (V)	550
Startup voltage (V)	45
Operating range (V)	45-550
MPPT voltage range (V)	45-500
Max input current per MPPT (A)	17
Number of MPPT	1
Max. Input strings number	1
Max. PV short circuit current per MPPT (ISC)	20
Output specifications	
AC output (grid side)	
Rated output power (kW)	2.5
Max. output power (kW)	2.5
Nominal AC current, RMS (A)	10.41
Max. output current (A)	11.90
Grid voltage range (V)	216-264
Grid frequency range (Hz)	50
Power factor (at rated output power)	>0.99 (adjustable from 0.8 leading. 0.8 lagging)
Total harmonic distortion [THDi]	<3% at rated load
Load feed-in phase / connection phase	Single phase
Interface	
DC connection	MC4 connectors
Display	LCD with LED indication
Datalogger & Communication	RS485 (default) / Wi-Fi / GSM (to be ordered along with inverter separately)
Efficiency	
Maximum efficiency (%)	96.44
MPPT efficiency (%)	>99.9
Euro efficiency (%)	96

Protection functions	
DC reverse polarity protection	Yes
Short circuit protection	Yes
Over current protection	Yes
Over voltage / Under voltage protection	Yes
Over frequency / Under frequency	Yes
Insulation resistance monitoring	Yes
Over voltage / Under voltage	Yes
Residual current detection	Yes
Surge protection	Type II SPD on AC and DC Side
Islanding protection	Yes
Temperature protection	Yes
Integrated DC switch	Optional
Integrated AFCI (DC arc-fault circuit protection)	Optional
General data	
Topology	Transformerless
Consumption @ night (W)	<0.5
Operating temperature range	-25 °C to +60 °C
Cooling method	Natural convection
Relative humidity	0 to 100% non condensing
Max. operational altitude	4000m
Noise (dBA)	<30
Designed lifetime	>20 years
Warranty	7 years + 3 years additional if product is registered on app within 15 days of commissioning
Ingress protection	IP65
Dimensions (W*H*D)	256*302*142mm
Net weight (Kg)	4.4
Mechanical integration	Wall mountable
Certifications	
Safety	IS 16169 : 2019 / IEC 62116 : 2014, IS 16221 (part 2) : 2015 / IEC 62109-2 : 2011
Environmental	IEC 60529
Electrical	IS 17980 : 2022 / IEC 62891 : 2020, IEC 61000

## Dimensions (All are in mm)



## Ordering information

Product code	Description
GTI002X51PN243-X	Grid tie inverter - 1 phase / 2.5kW, without WiFi & GSM module - 17A without DC Switch
AC-S2W-GTI-2	WiFi module

