

# LOW FREQUENCY PURE WAVE INVERTER

## TECA SERIE

### LOW FREQUENCY PURE WAVE INVERTER

IIP121000BF / IIP241000BF  
IIP242000BF IIP243000BF  
IIP244000BF /  
IIP484000BF IIP485000BF

### Features

- Rated power from 1kw to 5kw.
- Pure sine wave output.
- Wide frequency range between 40Hz and 80Hz.
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- Overvoltage, reverse polarity, over-temperature and short-circuit protection.
- Built-in UI pure copper transformer.
- Intelligent battery charger designed to optimize battery performance.
- Soft start function.
- RS232 monitoring via CD.
- BTS and AGS function backup.
- Remote control panel (optional)
- IP20 protection.
- Total harmonic distortion (THD) <3%.



### Design

Inti's Teca series comprises pure wave and low frequency inverters with AC charger from 35A to 70A, allowing solar or AC charging priority to be configured. When solar priority is set and the PV charging current is lower than the grid current, the AC current will deliver power to charge the batteries to optimize the charging process. Inti's Teca inverters have a built-in copper transformer, making them suitable for all types of residential applications.

**IIP121000BF /****IIP242000BF****IIP243000BF****IIP244000BF /****IIP485000BF****Rated system voltage**

12V / 24V

24V

24V

24V / 48V

48V

**AC Output**

Rated Voltage	1000VA	2000VA	3000VA	4000VA	5000VA
Start up Peak (20ms)	3000VA	6000VA	9000VA	12000VA	15000VA
Wave form	Pure Wave	Pure Wave	Pure Wave	Pure Wave	Pure Wave
RMS rated output voltage	230Vac ± 3%	230Vac ± 3%	230Vac ± 3%	230Vac ± 3%	230Vac ± 3%
Frequency	50Hz ± 3Hz	50Hz ± 3Hz	50Hz ± 3Hz	50Hz ± 3Hz	50Hz ± 3Hz
Inversor peak efficiency	>88%	>88%	>88%	>88%	>88%
Power factor	1.0	1.0	1.0	1.0	1.0
Transfer time	10 ms Max	10 ms Max	10 ms Max	10 ms Max	10 ms Max

**AC Input**

Voltage	230Vac	230Vac	230Vac	230Vac	230Vac
Voltage range	190-245Vac	190-245Vac	190-245Vac	190-245Vac	90-245Vac
Frequency range	50Hz	50Hz	50Hz	50Hz	50Hz

**Batteries**

Minimum start up voltage	10Vdc / 10,5Vdc @ 12V; *2 @ 24V	20Vdc / 21Vdc	20Vdc / 21Vdc	20Vdc / 21Vdc @ 24V; *2 @ 48V	40Vdc / 42Vdc
Low voltage alarm	10,5Vdc ± 0,3Vdc @12V; *2 @ 24V	21Vdc ± 0,3Vdc	21Vdc ± 0,3Vdc	21Vdc ± 0,3Vdc @24V; *2 @ 48V	42Vdc ± 0,3Vdc
Low voltage cut	10Vdc ± 0,3Vdc @12V; *2 @ 24V	20Vdc ± 0,3Vdc	20Vdc ± 0,3Vdc	20Vdc ± 0,3Vdc @24V; *2 @ 48V	40Vdc ± 0,3Vdc
High voltage alarm	16Vdc ± 0,3Vdc @12V; *2 @ 24V	32Vdc ± 0,3Vdc	32Vdc ± 0,3Vdc	32Vdc ± 0,3Vdc @24V; *2 @ 48V	64Vdc ± 0,3Vdc
High voltage recovery	15,5Vdc ± 0,3Vdc @12V; *2 @ 24V	31Vdc ± 0,3Vdc	31Vdc ± 0,3Vdc	31Vdc ± 0,3Vdc @24V; *2 @ 48V	62Vdc ± 0,3Vdc
Sleep mode consumption	<25W ON in power saving mode	<25W ON in power saving mode	<25W ON in power saving mode	<25W ON in power saving mode	<25W ON in power saving mode

**Charger**

Rated breaker for the AC charger input	10A	30A	30A	40A	40A
Overload protection	15,7Vdc @ 12V; *2 @ 24V	31,4Vdc	31,4Vdc	31,4Vdc @ 24V; *2 @ 48V	62,8Vdc
Maximum load current	35A @ 12V; 20A @ 24V	35A	45A	65A @ 12V; 35A @ 24V	40A

**Bypass and protections**

Wave form of input voltage	Sine Waveform	Sine Waveform	Sine Waveform	Sine Waveform	Sine Waveform
Rated input frequency	50Hz	50Hz	50Hz	50Hz	50Hz
Overload Protection	Breaker	Breaker	Breaker	Breaker	Breaker
Short-circuit Protection	Breaker	Breaker	Breaker	Breaker	Breaker

**IIP121000BF / IIP241000BF****IIP242000BF****IIP243000BF****IIP244000BF / IIP484000BF****IIP485000BF**

Nominal bypass breaker

10A

30A

30A

30A @ 24V; 40A @ 48V

40A

Maximum bypass current

30A

30A

30A

30A

30A

## Mechanical Specifications

Set-up

Wall Mount

Wall Mount

Wall Mount

Wall Mount

Wall Mount

Dimensions (An\*Al\*Pr) mm

426 \* 206 \* 178

426 \* 206 \* 178

426 \* 206 \* 178

601 \* 206 \* 178

601 \* 206 \* 178

Net Weight (kg)

16,5 / 17

20

24,8

38,2 / 35,8

45

## Others

Operation Temperature Range

0°C to 40°C

0°C to 40°C

0°C to 40°C

0°C to 40°C

0°C to 40°C

Storage Temperature

-15°C to 60°C

-15°C to 60°C

-15°C to 60°C

-15°C to 60°C

-15°C to 60°C

Audible Noise

60dB Max

60dB Max

60dB Max

60dB Max

60dB Max

Display

LED+ LCD

LED+ LCD

LED+ LCD

LED+ LCD

LED+ LCD

Degree of Protection

IP20

IP20

IP20

IP20

IP20