

# TCM-3022P / TCM-3022PN

## Off-Grid Solar Panel Hybrid Inverter

Equipped with TCM-3022P / TCM-3022PN solar charge controller to maximize and regulate DC power from the solar array for the charging the battery bank. Transformer-less design provides reliable power conversion in compact size and with high efficiency. With aluminum housing ,integrated interface system. It's light and handy ,making installation easier. It's the ideal inverters for small PV plants, or individually for small houses both indoors and outdoors.

#### **Features**

- Pure sine wave inverter
- Built- in PWM solar charge controller
- Selectable input voltage range for home appliances and personal computers
- Selectable charging current based on applications
- Configurable AC/Solar input priority via LCD setting
- Compatible to mains voltage or generator power
- Auto restart while AC is recovering
- Overload and short circuit protection
- Smart battery charger design for optimized battery performance
- Cold start function

Distributed by

## **Technicable Data**

1001111101111011111					
MODEL	TCM-3022P	TCM-3022PN			
Reted Power	3000VA/2400W	3000VA/3000W			
Parallel Capacity	No				
	INPUT				
voltage 230VAC	230VAC				
Selectable Voltage Range	170-280VAC (for personal computers)				
Colociasio Voltago Harrigo	90-280VAC (for home appliances)				
Frequency range	50Hz/60Hz (auto sensing)				
	DUTPUT				
AC voltage regulation(Batt.mode)	230VAC ±5%				
Surge power (5 seconds)	6000VA				
Efficiency (peak)	93%				
Transfer Time	10ms(for personal computers)				
Transfer time	20ms (for home appliances)				
Waveform	Pure Sine Wave				
BATTERY& AC CHARGER					
Battery Voltage	24VDC				
Floating Charge Voltage	27VDC				
Overcharge Protection	31VDC / 33VDC				
Max. AC charge curren	25A				
MAX PV array power	1200W				
Maximum Pv Array Open Circuit Voltage	80VDC				
Max.Solarcharge current	50A				
Max.Total charge current	70A				
Maximum Efficiency	98%				
Standby Power Consumpsion	2W				
PHYSICAL & OPE	RATING ENVIRONME	NT			
Dimension, D*W*H(mm)	100*2	72*385			
Net weight (kgs)	7KG				
Humidity	5%-95% relative humidity ( non- condensing)				
Operating Temperature	0°C -55°C				
Storage Temperature	- 15°C -60°C				

### Approximate Back-Up Time Table:

MODEL	Load (VA)	Backup Time @12VDC 100Ah(min)	Backup Time @12VDC 200Ah(min)
1KVA	200	766	1610
	600	198	503
	1000	112	269

MODEL	Load (VA)	Backup Time @24VDC 100Ah(min)	Backup Time @24VDC 200Ah(min)
3KVA	300	449	1100
	1500	68	164
	3000	28	67

### STRUCTURE of SOLAR POWER SYSTEM

