

THREE PHASE HYBRID INVERTER SYSTEM

HITC

Three-phase hybrid inverter

(for solar or wind generation, batteries and grid or emergency)

Description



The range of HITC hybrid inverters is designed to meet power requirements in locations not covered by the grid, hybrid rural electrification and distributed generation. The main feature of hybrid HITC inverters is that they are capable of generating electricity from Solar or Wind resources, from Batteries, from the Grid or Genset. Zigor three-phase HITC hybrid inverters have been designed to add energy from several different sources while controlling all of them from a unique management system.



HITC 100 KW

Features

- > Grid or Genset
- > Wind Turbine or PV field input through internal regulator
- > Back-up battery
- > Range of input DC voltages (450-700 VDC) for solar panels
- > Maximum power point tracking (MPPT) for solar panels
- > High energy efficiency MPPT > 99%
- > Very low harmonic distortion THD < 3%
- > Monitoring from the unit with LCD
- > Galvanic isolation via transformer
- > Strings Currents monitoring for solar panels (option)
- > IP21 protection level
- > Protection against: Inverse polarity, short circuits, overvoltages, isolation failure with relay output
- > Web server programme on PC for full access to HITC inverter data
- > Hybrid mains connection consumption points with limited power capacity or in which energy saving is a necessity
- > As back-up or for clients with high power availability requirements: Telecom installations, IT installations
- > Web server through Ethernet communication port
- > Easy access through any web browser

Connectivity and accessories

> HITC Web server integrated

PC-based Web server exclusive programme for full access to inverter data by Zigor to monitor and communicate with HITC inverters. (integrated)

on-grid solar plants

mid voltage solar plants

hybrid generation

energy saving

telecom back up

wind energy



NON - STOP POWER

ELECTRICAL CHARACTERISTICS			
Model	HITC 30	HITC 50	HITC 100
Reference	16288	300552 (50 Hz) 300553 (60 Hz)	016290 (50 Hz) 016291(60 Hz)
Maximum Continuous output power	30 KW	50 KW	100 KW
Recommended PV for rated power	≥ 31 Kwp	≥ 52 Kwp	≥105 Kwp
Nominal output frequency		50 / 60 Hz	
Power factor at full load		>0,99	
Maximum output current per phase	83/45 A	139/76 A	278/152 A
Voltage distortion AC		<3% at full load (2,5%)	
Nominal output voltage		208/220/240/380/400/440 Vac (3F+N)	
Maximum power efficiency		>96% (including transformer)	
MPPT efficiency		99%	
Internal consumption in operation		<1% at full load	
Isolation transformer		Internal	
AC / DC Switches		Internal	
Monitoring and supervision	Autochecking / Data and event log / Graphics software for communications		
User interface	2-line display, keyboard and 3 leds		
External interface	Standard: Ethernet, SNMP / Option: GSM modem		
INPUT GENERATOR SET			
Nominal power	≥ 30 KW	≥ 50 KW	≥ 100 KW
Nominal voltage		208/220/240/380/400/440 Vac (3F+N)	
Nominal frequency		50 / 60 Hz	
Maximum current per phase	139/76 A	194/106 A	389/213 A
BATTERY			
Nominal voltage		350 Vdc	
Voltage range		300 / 420 Vdc	
Charge maximum current	50 A	50 A	100 A
Discharge maximum current	103 A	173 A	350 A
INPUT PV			
MPPT voltage range		420 / 700 Vdc	
Maximum current	74 A	125 A	250 A
Maximum voltage		880 Vdc ⁽¹⁾	
Number of inputs		1	
GENERAL INFORMATION			
Operating ambient temperature range		-10°C to +50°C	
Cooling		Forced Air and external fan control (6 A)	
Relative Humidity		0% to 95% Non condensing	
Operating altitude		<1000 m without loss of power	
Enclosure rating		IP21 - standard	
Cabinet dimensions (HxWxD) (mm)	1950x1200x630 (400 Vac model) 1950x1300x630 (500 Vac model)	2150 x 1600 x 600	
Cabinet Weight	830 Kg	850 Kg	1320 Kg
STANDARDS			
Certificates		CE Marking	
Directives		2006/95/CEE-93/68/CEE 2004/108/CEE	
Standards		IEC-62109-1	

(1) This voltage must not be exceeded under any circumstances

These specifications may be changed without notice.