

## FEATURES

### Wide Input Range

- $\pm 30\%$  Input DC Range Provides You Uninterrupted Pure SineWave for Longer Period of Times
- No Need for any Additional Voltage Adjustment Facilities

### Isolation Transformer

Internally at Output

### IGBT Technology



Rack Type



Tower Type

- Uninterrupted bypass switching
- Faster Processing (DSP control)
- High Overload Capability
- Ingress Protection: IP20 to IP55
- Audiable & LED Alarm
- Compatible Modbus Protocol
- TMS protection at All Terminals
- Automatic Start and Fault Recovery
- Self-diagnostics with Log Records
- Smart Charging Facility, Built-in Battery Monitoring Facility
- Modular Board Structure for Easier Replacement and Repair

# INVERTA SERIES | INVERTER

KEY FEATURES		
Model	INVERTA-1	INVERTA-3
Output Phase	Single Phase	Three Phases
Conversion Topology	Insulated Gate Bipolar Transistor (IGBT Based)	
Control	DSP Controller	
INPUT PARAMETERS		
Input Voltage	24VDC to 220VDC ( $\pm 20\%$ )	24VDC to 650VDC ( $\pm 20\%$ )
Bypass Voltage	110VAC to 600VAC	
Bypass Frequency	50Hz, 60Hz or 400Hz	
OUTPUT PARAMETERS		
Output Power	Up to 200kVA	Up to 600kVA
Output Voltage	110VAC to 600VAC	
Voltage Tolerance	$\pm 1\%$ (Static), $\pm 5\%$ (Dynamic 100% load change 50ms)	
Output Frequency	50Hz, 60Hz or 400Hz ( $\pm 1\%$ sync, $\pm 0.5\%$ not sync)	
Power Factor	0.8	
Efficiency	Up to 93%	
Waveform	Pure Sinus Wave	
Switch to Bypass	<5ms	
Switch to Inverter	0ms (Re-transfer delay adjustable)	
Crest Factor	3:1	
Overload (INV)	Load 125%: 10min Load 150%: 1min Load 200%: 1sec	
Overload (BYP)	Load 110%: Continuous Load 150%: 1min Load 1000%: 50ms	
THDu	<2% (linear), <5% (non linear)	
PHYSICAL CHARACTERISTICS		
Cabinet Type	Rack / Tower (OPT: Others)	
Cabinet Colour	RAL7032, RAL7035 (OPT: Others)	
Protection Degree	IP20 (OPT: IP21 to IP55)	
Cooling System	Fan Forced Ventilation (OPT: Natural Cooling, Water Cooling, Smart Fans)	
Cable Entry	Bottom (OPT: Top, Rear, Side)	
ENVIRONMENT		
Storage Temperature	-25 to 70°C	
Operating Temperature	-10 to 50°C	
Relative Humidity	0 to 95% (Non-Condensing)	
Operating Altitude	1000m from MSL (1% derate each 100m after 1000m)	
Acoustic Noise	55dB to 80dB	
COMMUNICATIONS		
Standard Communication	ModBus RTU over RS232 (OPT: RS485, ModBus TCP/IP, SNMP and IEC61850), Dry Contact x4 (OPT: to x16)	
Paralel Operation	Passive: Infinite (OPT: Active: Up to 2 Units)	
HMI	LED/LCD Panel (OPT: Touch Screen Panel, Mimic Panel)	
Languages	Turkish, English, German, Dutch, Portuguese, Spanish, Russian	
PROTECTIONS		
Input / Output Protection	MCB or MCCB for Input and Output Line Failure, AC Synchronization, Short Circuit Output Current Limiting, Overload, Over Voltage, Undervoltage, Over Temperature	
ADDITIONAL FEATURES (OPT.)		
MBS	Full isolation with maintenance Bypass	
Operating in Parallel	1+1 system (Standby, Current Sharing, Parallel Redundant)	
Gauges	Input Voltage & Current & Frequency Output Voltage & Current & Frequency	
DC Power Supply	Output & Battery Monitoring Continue (when AC Fails)	
Protections	Fan Failure, SCR Fuse Failure, Breaker Off, External Block, Parallel Fault	
Others	Cabinet Heater, Cabinet Lightning, Service Plug	
STANDARDS		
EN62040-1	General and Safety Requirements for UPS	
EN62040-2	Electromagnetic Compatibility (EMC) Requirements fo UPS	
ISO14001 - ISO9001	Quality Assurance	

**Note:** Product properties may change without a notice by EPC.