











## **ESTIA UPS**

3 Phase In - 3 Phase Out / 10 - 20 kVA

- On-Line "Double Conversion" technology
- Real DSP (Digital Signal Processor) Controlled Processor
- High Input Power Factor (PFC > 0,99)
- High Efficiency
- Low Input Current Harmonics (THDi < 3%)
- Low Output Voltage Harmonics (THDv < 2%)
- Easy-use LCD Display
- Energy Saving Mode (ECO Mode)
- Cold Start
- Redundancy and Power increase thanks to Paralleling feature (Optional)
- Wide Frequency and Voltage Range
- Smart Battery Management Software & Deep Discharge Protection
- Automatic Battery Test Feature
- Adjustable Battery Quantity
- External Battery Support for Long Backup time (Optional)
- Battery Recharge Support with High Current (up to 9A)
- Standard built-in Static and Manual Bypass
- Short circuit and Overload Protection
- Built-in Back Feed Protection
- Temperature Controlled Smart Fan Speed Regulation
- Frequency Converter Operation Mode Selection
- Generator Compatible Operation
- Advanced Event Records
- Statistical Daily Data Records
- Broad Communication Option
- Standard: RS-232, USB, EPO, GENSET, STS Sync
- Optional: SNMP, Relay Card, Modbus
- Two Years Full Warranty in accordance with ISO 9001, ISO 14001, CE standards
- INFORM 7/24 Technical Support and Customer Services

















## **Estia**

## **TECHNICAL SPECIFICATIONS**

MODEL	ESTIA 10KVA	ESTIA 15KVA	ESTIA 20KVA
Capacity (kVA/kW)	10kVA/8kW	15kVA/12kW	20kVA/16kW
INPUT			
Phase Number	3Ph + N + PE		
Nominal Voltage	380 / 400 / 415 VAC		
Voltage Range (VAC) (100% Load)*	[-15%] [+20%]		
Voltage Range (VAC) (50% Load)*	[-45%] [+20%]		
Frequency	50/60 Hz ±10% (Auto Sensing)		
Input Power Factor	>0,99		
Input Current Harmonics (THDi) **	≼3%		
OUTPUT			
Output Power Factor	0,8		
Phase Number	3Ph + N + PE		
Nominal Voltage	380 / 400 / 415 VAC (Adjustable from LCD menu)		
Voltage Harmonics (THDv) **	< 2% (Linear Load), <3% (Nonlinear Load)		
Frequency	50Hz or 60Hz (Adjustable from LCD menu)		
Frequency Tolerance	Utility Mode: Rated frequencies ±1% ±2% ±4% ±5% ±10%		
, ,	Battery Mode: (50/60±0.2%)Hz		
Voltage Regulation	±1%		
Crest Factor	3:1		
Transfer Time	Online-Battery : Oms; Online-Bypass: Oms		
Overload	10 minutes at 110% load; 1 minute at 125% load; 10 seconds at 150% load		
Efficiency*	Up to 92%		
STATIC BYPASS			
Static Bypass Voltage Tolerance	380/400/415 VAC (Adjustable from LCD menu -15% +12%)		
Static Bypass Frequency Tolerance	47 Hz - 53 Hz (Adjustable)		
BATTERY			
Туре	Maintenance-Free Dry Type		
Recharge Time (For Internal Battery)	4-6 hours up to 90%		
Battery Quantity (with Battery)	16x12V 9 Ah	24x12V 9 Ah	32x12V 9 Ah
Battery Quantity (without Battery)	16-32 pcs (on request)	24-32 pcs (on request)	32 pcs
Recharge Current (Max.)	max. up to 9A (Adjustable)		
Cold Start (Start-up in no mains)	Present		
ALARMS			
Audible & Visual	Mains Failure, Battery Low, Overload, System Fault		
DISPLAY			
Indicator LED & LCD	Online mode, Bypass mode, Battery Low, Overload & UPS Failure		
LCD Display	Input Voltage, Current & Frequency, Output Voltage, Current & Frequency, Output power values (KVA, KW), Load Power Factor (PF), Load Rate, Battery Voltage & Current, Battery backup time, Bypass Voltage & Frequency, Output Current, Crest Factor, Internal Temperature		
Lob Bisplay			
PROTECTION			
	Overload, Sh	ort circuit, High Temperature, Battery Dee	ep Discharge
COMMUNICATION ***			
	Standard:RS232, USB, EPO, GENSET, STS SYNC Optional: SNMP, Dry Contact, RS485, Modbus		
ENVIRONMENTAL CONDITIONS			
Operation Temperature Range	0°C - 40°C (20°C - 25°C recommended temperature for long battery life)		
Storage Temperature	-25°C - +55°C (15 - 40°C recommended temperature for long battery life)		
Humidity	0 - 95% ( non-condensing )		
Operational Altitude	1500 meter		
Noise Level (from 1m distance)	<60 dB		
Protection Class	IP20		
PHYSICAL SPECIFICATIONS			
Dimensions (mm) (WxDxH)	295x620x700 295x620x875		
Weight (w/o battery) ( kg )	45	5	50
Weight (with 12V 9Ah) ( kg )	90	113	135
Installation Type	Floor, Wheeled (Tower)		
TANDARDS			
	EN 62040-1(Safety), EN 62040-2 (EMC), EN 62040-3 (VFI-SS-111)		

<sup>\*</sup> Depending on rated power and load rate at the output
\*\* Depending on UPS power and environmental conditions
\*\*\* Please contact with your sales representative for communication options