# ONLINE UPS

**HTXi Series** 







Answering All Power Needs

















# 30 Years Experience In Manufacturing And Development In Cutting Edge Inverter And Converter Technology.

### **ABOUT ENERTECH**

#### **VISION**

To enrich our customers with reliable, clean and interrupt free power with use of conventional and non conventioanal sources.

#### **QUALITY POLICY**

At Enertech UPS Pvt. Ltd. our core purpose is to ensure customer - delight through offering a range of power electronics products that meets international standards of quality and performance with emphasis on user - friendliness and economy as parameters for continual improvement of products as well as our quality management systems.

#### **VALUES**

- ◆ We believe in continual improvement for the betterment.
- We will never give up service, we stand with our comitments.
- ◆ Organization before Self
- ◆ We have no Place for Non Performers.

Enertech® UPS Pvt. Ltd. is a leading fast moving Indian multinational manufacturing company, providing the next generation technology products solutions for the Renewable and Power sectors.



We provide a comprehensive wide range of power management solutions including Solar hybrid Inverter, Solar UPS, Online UPS, Industrial UPS, Industrial Battery Charger, Static Frequency Converter. With the in-house R&D setup Enertech strive for constant success in leveraging technological innovation with next generation patented technology solutions.

Enertech® with its head quarter at Pune was established in the year 1989. All operations are at Sigma Level 4.87. The company has purposefully expanded by providing power solutions for IT, Industrial, Healthcare, Banking, and Infrastructure over the period and expanded footprints in Africa, Tanzania, Zambia, Cameroon, Nigeria, Niger, Yemen, Sudan, Zimbabwe, USA.

# 5kVA - 600kVA Performing, Reliable & Efficient Power Solution for Mission Critical Applications

# **DESIGN**

- ◆ Patented Technology.
- ◆ Modular & Flexibility in Design.
- ◆ Grid Utilization.

# **QUALITY**

- In House Engineering Workmanship.
- Every Unit Shipped Fully Tested.
- Utilization of Long Lasting Component.



## **SERVICES**

- Over 50+ Factory Trained Engineers.
- Pan India Parts Available.
- Industrial Leading Warranty Terms.

## **VALUE**

- Lowest TCO
- Functionality & Performance
   Design for 10+ Years Lifetime



Manufacturing: Pharmaceutical, Retails, Textile



Power Generation



Oil & Gas



**Export House** 



Cement Plant



Steel Plant



**IT Company** 



Chemicals and Fertilizer



Healthcare Centre



Gov. Offices

# **ENERTECH HTXI ONLINE UPS SERIES**

### **PERFORMANCE**

Utilizing a combination of high sampling rates and Direct Digital Control (DDC) with Analog fast comparator, the Enertech® HTXi UPS is able to provide superior performance under all load conditions.

### **RELIABILITY**

If downtime in your business equals disaster, Enertech® HTXi Series UPS delivers the highest reliability among backup power equipment suppliers through robust technology designed to deliver continuous power in the most demanding environments.

Enertech® HTXi UPS Series is suitable for a wide range of applications including IT, security, telecommunications, electro-medical systems, and the

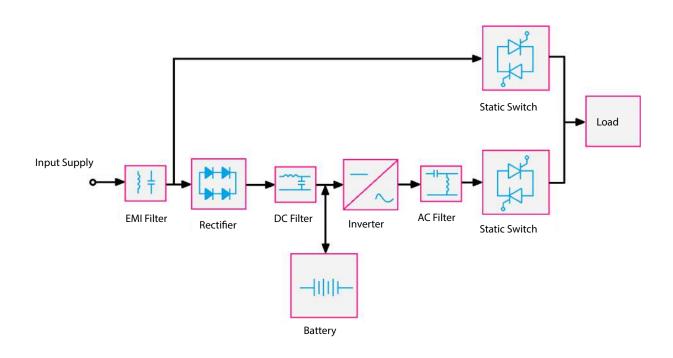
most demanding industrial environments.

The transformer-based design of Enertech® UPS series provides protection from the massive range of power irregularities including unmatched efficiency, usability and space savings.

Enertech® UPS is a complete power protection solution that helps to achieve maximum

optimization of the infrastructure around design, operating and management proficiencies while maintaining or improving availability.

Benefits to the customer include excellent output voltage control, dynamic inverter response, and minimal voltage distortion during full load steps without the DC source. These characteristics maximize the performance of the UPS and increase the overall reliability of components and the system.



# ADVANCED FEATURES FOR MAXIMUM PERFORMANCE

Enertech UPS HTXi Series designed to meet a wide array of mission critical application power continuity needs. It is designed with the latest technology to provide your

business with maximum power condition.

## **FEATURES**

- ◆ 32bit DSP Based Processor.
- ◆ Bidirectional Power Conversion.
- ◆ IGBT Based Rectifier.
- Inbuilt Isolation Transformer Technology.
- Vector Modulated Inverter Control Design.
- ◆ Suitable for 100% Unbalanced Load.
- 3-Stage with Temperature Compensated Charger.
- MODBUS Compatibility for Lithium-ion Batteries.
- Compatible with Different Battery Technology.
- ◆ Remote Monitoring unit.
- Solar Compatibility.
- ◆ Enclosure IP21 (Optional Up to 55).



VFI-SS-111 EN 62040-3 Classification

## **APPLICATION**

Defense Industrial Automation Petrol Pump Institutes Oil and Gas Transportation Cement / Steel Plant Health Care Centre Cold Storage Manufacturing Unt IT Company Banks



# **Techinical Specifications for Online UPS**

STANDARD SPECIFICATION		HTXi Series -	5kVA to 600kVA
		HIM Selles -	
UPS Type	1PH-1PH	3PH-1PH	3PH-3PH
Inverter	5.0 - 10 kVA	5.0 - 40 kVA	5.0 - 600 kVA
DC Nominal Voltage	96 /120 / 180 V	240 / 360 V	240 / 360 / 384 V
Topology	ļ	Onine Double Con	
Technology	32 bits DSP using IGBTbased advanced Multi-level Conversion with Inbuilt Isolation Transformer Technology		
MINIT			
INPUT	170, 360 V	350 460 V	250 4507
Input Voltage Range * Nominal Frequency	170 - 260 V	350 - 460 V	350 - 460 V (± 10%)
Input Power Factor	<u> </u>		r to unity
Input Fault Level	10 kA		
Power walk - in period	10 secs-Configurable		
DG Compatibility	Yes		
Cold / Soft Start Capability	Yes		
CHARGER	(CDT Panel		
Charger Type	IGBT Based ± 1%		
Nominal Voltage Regulation	<1%		
Ripple Voltage (With Battery) Charging Method	Constant Voltage Constant Current (CVCC)		
enarging meaned	Constant voltage Constant Current (CVCC)		
BATTERY			
Type & No. of cells	Lead Acid / VRLA / Ni-Cd / Lithium		
Battery Test feature	Inbuilt in UPS		
OUTPUT			
Load Power Factor		0.8 lag kVA	A & kW rating
Output Nominal Voltage	230 V ± 1%	230 V ± 1%	380 / 400 /415 V ± 1%
Output Frequency		50 Hz	z±0.5%
Output Waveform	Pur Sia wave		
Total Harmonic Distortion	< 3% Max. for 100% Linear Load   < 5% Max. for 100 % Non-Linear Load		
Overload Capacity	125% for 60 sec., 150% for 5 sec		
Changeover Time	Mains to Battery & Battery to Mains 0 msec		
Short Circuit Capacity	200% Transformer at output side		
Galvonic Isolation Inverter	Transformer at output side  IGBT based PWM with INSTANTANEOUS SINEWAVE CONTROL		
Dynamic Response	For 0 to 100% step load change the output shall remain within ±5% & recover to 98% within one cycle		
Crest Factor	3:1		
Duty	Continuous		
Output Protection	Output High, Output Low, Temperature, Over Load, Short Cuircuit		
STATIC CHUTCH			
Transfer (Inverter to Rypass)	In Async. Mode - < 10 ms		
Transfer (Inverter to Bypass) Retransfer (Bypass to Inverter)	II ASYN. Mode ~ 10 IIIS  II ASYN. Mode		
MANUAL BYPASS	Built in		
SYSTEM CONFIGURATION	Stant Alone		
AC-AC Efficiency (%)	Up to 94%		
ENVIRONMENTAL			
Operating Condition	Dust free, Cool & Dry Environment		
Acoustic Noise Level	≤ 65 dB(from 1 m distance( Ref : ISO 3746))		
Operating Temperature	0 to 40 Deg C		
Storage Temperature	0 to 55 Deg C		
Relative Humidity	Up to 5% (Non Condensing)		
Altitude  Basic seismic qualification	Upto 1000 & (1000 to 3000) ***  0.5g (The test inspection shall be with extra cost)		
PHYSICAL		o.5g (The test hispectio	
Enclosure Protection Grade		IP20 ( IP 21 to	IP 55 Optional)
Enclosure Mounting	Floor Mounted		
	upto 2.0 mm thick		
Enclosure Thickness	<u> </u>		
Cooling		Force	ced Air
Cooling Colour	RAL	7016 Force	ced Air RAL 7016 / RAL 9016
Cooling Colour Cable Entry	RAL	Force 7016 Front si	ced Air RAL 7016 / RAL 9016 de / Back side
Cooling Colour Cable Entry GLAND PLATE	RAL	Ford 7016  Front si 3 mm M	ced Air  RAL 7016 / RAL 9016  de / Back side  IS C.R.C.A.
Cooling Colour Cable Entry GLAND PLATE UTILITY SOCKET	RAL	Forc 7016  Front si 3 mm M 5 A / 2	zed Air RAL 7016 / RAL 9016 de / Back side 15 C.R.C.A. 230 VAC (Optional)
Cooling Colour Cable Entry GLAND PLATE		Forc 7016  Front si 3 mm M 5 A / 2 2 for electronic dev	ced Air RAL 7016 / RAL 9016 de / Back side 15 C.R.C.A. 230 VAC (Optional) rices, 1.1 for electrical
Cooling Colour Cable Entry GLAND PLATE UTILITY SOCKET		Forci 7016  Front si 3 mm M 5 A / 2 2 for electronic dev	red Air  RAL 7016 / RAL 9016  de / Back side  IS C.R.C.A.  230 VAC (Optional)  rices, 1.1 for electrical  IPS, IEC - EN 62040-2:2006: Uninterruptible power systems (UPS).
Cooling Colour Cable Entry GLAND PLATE UTILITY SOCKET SAFTEY FACTOR		Forc 7016  Front si 3 mm M 5 A / 2 2 for electronic dev EN 62040-1: 2008: General and safety Requirements for U Electromagnetic compatibility	ted Air  RAL 7016 / RAL 9016  de / Back side  15 C.R.C.A.  230 VAC (Optional)  rices, 1.1 for electrical  IPS , IEC - EN 62040-2:2006: Uninterruptible power systems (UPS).  (EMC) requirements IEC 62040 – 3
Cooling Colour Cable Entry GLAND PLATE UTILITY SOCKET SAFTEY FACTOR		Force 7016  Front si 3 mm M 5 A / 2 2 for electronic dev EN 62040-1: 2008: General and safety Requirements for U Electromagnetic compatibility	red Air  RAL 7016 / RAL 9016  de / Back side  SC C.R.C.A.  230 VAC (Optional)  rices, 1.1 for electrical  JPS , IEC - EN 62040-2:2006: Uninterruptible power systems (UPS).  (EMC) requirements IEC 62040 – 3
Cooling Colour Cable Entry GLAND PLATE UTILITY SOCKET SAFTEY FACTOR  ILLUMINATION LAMP EARTHING CONNECTION		Force 7016  Front si 3 mm M 5 A / 2 2 for electronic dev EN 62040-1: 2008: General and safety Requirements for U Electromagnetic compatibility  11 W C 5-20 kVA : 3 x 25 mm CU (Eart	red Air  RAL 7016 / RAL 9016  de / Back side  15 C.R.C.A.  230 VAC (Optional)  rices, 1.1 for electrical  IPS, IEC - EN 62040-2:2006: Uninterruptible power systems (UPS).  (EMC) requirements IEC 62040 – 3  IFL  h bus bar running along the panel)
Cooling Colour Cable Entry GLAND PLATE UTILITY SOCKET SAFTEY FACTOR		Forc 7016  Front si 3 mm M 5 A / 2 2 for electronic dev - EN 62040-1: 2008: General and safety Requirements for U Electromagnetic compatibility 11 W C 5-20 kVA : 3 x 25 mm CU (Eart 30 - 150 kVA : 6 x 25 mm CU (Ea	red Air  RAL 7016 / RAL 9016  de / Back side  IS C.R.C.A.  230 VAC (Optional)  rices, 1.1 for electrical  IPS, IEC - EN 62040-2:2006: Uninterruptible power systems (UPS).  (EMC) requirements IEC 62040 – 3  FL  b bus bar running along the panel)  arth bus bar running along the panel)
Cooling Colour Cable Entry GLAND PLATE UTILITY SOCKET SAFTEY FACTOR  ILLUMINATION LAMP EARTHING CONNECTION		Forc 7016  Front si 3 mm M 5 A / 2 2 for electronic dev - EN 62040-1: 2008: General and safety Requirements for U Electromagnetic compatibility 11 W C 5-20 kVA : 3 x 25 mm CU (Eart 30 - 150 kVA : 6 x 25 mm CU (Ea	red Air  RAL 7016 / RAL 9016  de / Back side  15 C.R.C.A.  230 VAC (Optional)  rices, 1.1 for electrical  IPS, IEC - EN 62040-2:2006: Uninterruptible power systems (UPS).  (EMC) requirements IEC 62040 – 3  IFL  h bus bar running along the panel)
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Cooling Colour Cable Entry GLAND PLATE UTILITY SOCKET SAFTEY FACTOR  ILLUMINATION LAMP EARTHING CONNECTION (Ref. IS 3043)		Forc 7016  Front si 3 mm M 5 A / 2 2 for electronic dev EN 62040-1: 2008: General and safety Requirements for U Electromagnetic compatibility 11 W. C 5 - 20 kVA : 3 x 25 mm CU (Ea 200-300KVA : 6 x 30 mm CU (Ear	ted Air  RAL 7016 / RAL 9016  de / Back side  15 C.R.C.A.  230 VAC (Optional)  rices, 1.1 for electrical  IPS, IEC - EN 62040-2:2006: Uninterruptible power systems (UPS).  r(EMC) requirements IEC 62040 – 3  EFL  th bus bar running along the panel)  rth bus bar running along the panel)
Cooling Colour Cable Entry GLAND PLATE UTILITY SOCKET SAFTEY FACTOR  ILLUMINATION LAMP EARTHING CONNECTION (Ref. IS 3043)  CONNECTIVITY OPTIONS UPS Monitoring SNMP RJ45		Forc 7016  Front si 3 mm M 5 A / 2 for electronic dev  EN 62040-1: 2008: General and safety Requirements for U Electromagnetic compatibility  11 W C 5- 20 kVA : 3 x 25 mm CU (Eart 30 - 150 kVA : 6 x 25 mm CU (Eart 200-300KVA : 6 x 30 mm CU (Eart 200-300K	red Air  RAL 7016 / RAL 9016  de / Back side  15 C.R.C.A.  230 VAC (Optional)  rices, 1.1 for electrical  IPS , IEC - EN 62040-2:2006: Uninterruptible power systems (UPS).  (EMC) requirements IEC 62040 - 3  IFL  h bus bar running along the panel)  with bus bar running along the panel)  rith bus bar running along the panel)  rith bus bar running along the panel)  orth bus bar running along the panel)  orth bus bar running along the panel)  orth bus bar running along the panel)
Cooling Colour Cable Entry GLAND PLATE UTILITY SOCKET SAFTEY FACTOR  ILLUMINATION LAMP EARTHING CONNECTION (Ref. IS 3043)  CONNECTIVITY OPTIONS UPS Monitoring SIMP R145 Serial to Ethernet Card		Forc  7016  Front si 3 mm M 5 A / 2 2 for electronic dev EN 62040-1: 2008: General and safety Requirements for U Electromagnetic compatibility  11 W C 5-20 kVA : 3 x 25 mm CU (Eart 30 - 150 kVA : 6 x 25 mm CU (Eart 200-300kVA : 6 x 30 mm CU (Eart RS 232 based / Ethern SNM	red Air  RAL 7016 / RAL 9016  de / Back side  IS C.R.C.A. 230 VAC (Optional)  rices, 1.1 for electrical  IPS, IEC - EN 62040-2:2006: Uninterruptible power systems (UPS).  r(EMC) requirements IEC 62040 – 3  FL  In bus bar running along the panel)  rith bus bar running along the panel)
Cooling Colour Cable Entry GLAND PLATE UTILITY SOCKET SAFTEY FACTOR  ILLUMINATION LAMP EARTHING CONNECTION (Ref. IS 3043)  CONNECTIVITY OPTIONS UPS Monitoring SNMP RJ45		Forc 7016  Front si 3 mm M 5 A / 2 for electronic dev - EN 62040-1: 2008: General and safety Requirements for U Electromagnetic compatibility - 11 W C - 5-20 kVA : 3 x 25 mm CU (Eart - 30 - 150 kVA : 6 x 30 mm CU (Eart - 200-300kVA : 6 x 30 mm CU (Eart - RS 232 based / Ethern - SNM - 1) RS23	red Air  RAL 7016 / RAL 9016  de / Back side  15 C.R.C.A.  230 VAC (Optional)  rices, 1.1 for electrical  IPS , IEC - EN 62040-2:2006: Uninterruptible power systems (UPS).  (EMC) requirements IEC 62040 – 3  IFL  h bus bar running along the panel)  with bus bar running along the panel)  rith bus bar running along the panel)  rith bus bar running along the panel)  orth bus bar running along the panel)  orth bus bar running along the panel)  orth bus bar running along the panel)

<sup>#</sup> Specifications are subject to change without prior notice

<sup>\*</sup> with tolerance of 5v

<sup>\*\* 1.6 %</sup> derating per 100 m

## **Remote Monitoring Solution**

#### MONITORING ON THE GO & AT YOUR DESK !!!

Suitable Protocol: RS-232/MODBUS/RS-485

IOT based monitoring system- to enable customer to monitor critical HTXI Online UPS systems at their desk or phone. By using remote monitoring equipment at your sites, you'll now have the visibility you need to monitor and control your Systems.

- All HTXI Online UPS systems in a facility is connected to Enertech® RMS Interface to collect data and transfer to network system / cloud to process data
- Remote PC, mobile is configured with RMS Software for HTXI Online UPS monitoring on the GO and always at your desk.



# **BENEFITS**

- Continuous HTXI Online UPS monitoring and access to data.
- ◆ Load trend and graphs in your mobile.
- Data on power failures in a day / week / month.
- ◆ HTXI Online UPS Alerts on email /SMS.
- ◆ Daily/weekly/monthly reports
- 24x7 remote monitoring Peace of mind.
- ◆ Connectivity Via GSM/Wi-fi.
- Report with pop-up alarms.





# Enertech® Highly Reliable And Efficient Products are Backed by A Highly Responsive and Dependable Field and Factory Services

Your business runs around the clock, and so does Enertech. With 24x7 technical support coverage, including weekends and holidays, The Technical Support team at Enertech is dedicated to protecting your investments

With factory trained engineers positioned throughout the India, rapid response times can significantly reduce downtime and loss of revenue.

Highly skilled Technical Support representatives are available to troubleshoot by phone and, If necessary, Can dispatch the expert Service engineer to your site.



50+ Service Personnel Pan-India



Pan-India Spare Parts Operations



Wide Repair Network

# **SERVICES**

- Start-up / Installation
- Factory and On-site Testing
- Preventive Maintenance
- Extended Warranty

Please call for Technical Support

+91 9372623418

#### **ENERTECH UPS PVT. LTD.**

S. No. 399/1-2, Bhare, P. O. Ghotawade, Near Pirangut, Taluka- Mulshi Dist.- Pune - 412115

Domestic and International Presence 7 x 24 x 365 Customer Service Suppor

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### **Our Offering**

Online UPS, Static Frequency Converter, Solar UPS, Industrial Battery Charger













