# ProXtend HE ONLINE UPS

Critical Power Protection, Zero Downtime!

The **ProXtend HE** UPS presents optimized robust power protection & performance, highest availability & versatility for harshest industrial environments, healtcare and datacenter applications whilst reducing TCO & minimising the time for ROI.





















Control

Data Centers

Healthcare **Environment & Facilities** 

Telecom Emergency Applications Applications

Transportation

# **Product Snapshot**

# Delivers An Outstanding Power Performance & Increased Power Quality

- True VFI | online double conversion design guarantees the complete isolation of critical load from any mains disturbances.
- Transformerless; high frequency, IGBT rectifier & inverter design via PWM technique presents active power factor correction at input which lowers THDi at input & maximizes the input power factor as > 0,99. This leads minimized generator: UPS sizing, less investment and costs due to very low harmonics. The system reduces the effect on utility and the loads connected to the same network with the ups itself. IGBT design at the inverter stage also brings high output power as 0,9 or 0.88while reducing the THDv as low as 1%.
- Twin DSP microprocessor control offers maximized reliability, total protection of UPS & critical load aganist failures & damages, unbeatable parallel redundant operation in business-critical environments and applications.
- Transformerless design also brings a compact, lightweight design which brings ease of transport, installation and maximizes power density in minimum footprint as low as 0,67 m2 for a 250 kVA ProXtend UPS
- Greater adaptability, versatility in system configurations, higher immunity to harmonics, sudden inrush currents & energy backfeed generated by the load. & environments with high RFI [loads compliant like CNC, CT]

# Controlling Both CAPEX and OPEX

- Delivers industry leading 95%\* AC~AC online double-conversion efficiency without sacrificing reliability. Thanks to its highly efficient design, savings can reach up to 35% in dissipated energy in one year compared to traditional legacy UPS [91%] systems resulting in a faster payback period of 4 years as ROI.
- HVAC systems and cooling infrastructure initial investment is kept at minimum while cooling costs such as power, maintenance of HVAC units are at minimum. Keeping power & cooling infrastructure cost at minimum [CAPEX] along with operating costs at minimum [OPEX], ProXtend UPS gives the power
- Scalability Pay as You Grow! Capacity can flex to meet power infrastructure growth by adding an additional ups in the field, ease of expansion from medium-sized installations to hyperscale infrastructures.

# The UPS ProXtend HE: Power Protection and More

The **ProXtend** is a next-generation VFI | online double conversion high frequency three phase UPS which offers high electrical & mechanical robustness, high reliability for various industries & applications. The UPS uses the latest IGBT-PWM technology & DSP control to provide maximum power protection performance, increased power quality & clean, continuous power for any type of application.

ProXtend offers one of the lowest TCO & fastest ROI in the industry with its high efficieny values and power density. Its robust design, proven reliability and maximised availability which dramatically decrease operational downtimes and costs during its lifetime and true scalability makes it indispensible to various industries worldwide.

Advanced battery care design, zero impact on utility, generators & loads connected to the UPS itself also makes it superior by the proven data aganist traditional legacy ups system along with many rivals existing in the market.

**ProXtend** is engineered to meet the needs of demanding environments & businesses worldwide.

#### **Advanced Battery Care**

The UPS **ProXtend** provides extended service life for batteries via its three stage charging mode. Thanks to its innovative software helps the user to monitor battery health & remaining back up period, extended scalable battery runtimes is not a matter with XRP.

# Reliability, Availability and Serviceability (RAS)

Maximized availability and reliability by the power engineering at its top level, ProXtend offers very robust & reliable power protection, this also leads minimized downtime and highest level of availability. Very high level of MTBF [Mean Time Between Failures ] and very low MTTR [ Mean Time to Repair ] ensures the critical load not to fail for its duty. Serviceability is a measure of the system to be recovered after a disaster. A min. of 15 mins. of enough for a technician to diagnose and recover the system to reduce the downtime for business.





# **Technical Specifications**

**UPS** Rating

Rated Power [kVA]	160	200	250	300	400	
Active Power [kW] [for Model S]		160	200	240	320	PF = 0.8
Active Power [kW] [for Model E]		180	225	270	360	PF = 0,9
General Characteristics						
MTBF/ MTTR					an 15 Minu	ites
UPS Type & Technology	[Comple High F Transfe	VFI   Online Double Conversion [Complete Isolation of Output Load with Any Mains Disturbances] High Frequency Operation, IGBT Rectifier & Inverter, Transformerless Design Twin DSP Microprocessor Control via PWM Technique				
62040-3	COMP	ATIBLE				
Power Factor	0.9 (as	Standaı	rd, PF : 0	,8 Versic	n is Availa	able)
Input Voltage Range	-45%	~ +27%	[at 64%	Rated L	.oad]	
True Redundancy	N+X, N	N+1 Red	undant (	onfigur	ations	
Parallel Configuration [N+1]	Up To	8 Units				
Standard Protection Features	Input Power Limiting, Phase Reversal, Power Module Over Temperature, Over Current, High Temperature Alert, Smart Short Circuit, Regenerative Load, Current Limiting, Charging Current Limiting, Temperature Compensated Charging.  Deep Discharge Protection with Auto Cut-Off					
Operating Conditions						to 55% RH, em Lifetime/ Health
Cooling/ Isolation						Smart Fan Speed Cont
Display & Parameters	Mimic for Util Equipp LCD D Input, & Out <sub>l</sub> Power Percer Battery Up Per Tempe	lity, Bypa bed with isplay: Bypass, put Curr [VA], Oi tages [9 Curren riod [mir	e not ava ass, Batte 3,5" Gra Output N ents [A], utput Ac 6] for Ea t, Batten ns.], DC [	ery, Recti phical To loltages Load Co tive Pow ch Phase Tempe Bus Volta	ifier, Invertouchscree  [V] & Frecurrents [A]  ver [W], Oile, Battery Verature [°Cages for +	low Diagram is Used ter & Load n quency [Hz], Input quency [Hz], Input thput PF, Load Voltages for + & - String, Remaining Battery B & - Strings, Internal erature [°C],
Maintenance Bypass	STANE	DARD				
Material [Casing]/ Colour	BLACK					
Cable Entry	REAR/	FRONT	вотто	М		
Efficiency						
AC~AC Mode	Up To	95%				
Eco-Mode	> 98%					
DC~AC/ Battery Mode	< 97%					
Input Characteristics						
Rated Voltage & Range	-15% ~ -45% ·	~ +27% ~ +27%	VAC 3P- [at 100% [at 64% [at 42%	Rated L Rated Lo	oad]	
Rated Frequency & Range			% [Onlir			
Power Factor	> 0,99	Active	Power F	actor Co	orrection (	Circuitry
Current Distortion [THDi]	< 3%					
D-44						
Battery  Rated Voltage (DC)	700	VDC C	0+101/0-1	. N.4-1		- Coolod Lood & Cl. 1
Rated Voltage [DC]				Maintei	nance Free	e Sealed Lead Acid - \
DC Input Voltage Range Intelligent Battery Managemer Charging Capacity Operating Temperature	t Tem Deep Sche	Discha duled/A	Compe rge Prot utomatio	ection, : & Man	1 Stage Ch	y Test,
	250/	of Date.	I D			onger Battery Lifetime



# TSINE ELEKTRONİK SANAYİ VE TİCARET LTD. ŞTİ.

Beyit St., No: 55/4, Yukarı Dudullu, Umraniye P.O. BOX: 34775 İSTANBUL / TURKEY





# **Output Characteristics**

Rated Voltage & Accuracy	380/400/415 VAC 3P+N+PE < ±1% at 100% Rated Linear-Static Load.
	< ±2% at Non-Linear Load; < ±5% at Dynamic Loads
Rated Frequency & Accuracy	50/60 Hz (Selectable), ±1% (Synchronized to Mains) ±0,01% (Free Running Mode, Selectable)
Power Factor	0.9 (as Standard, PF : 0,8 Version is Available)
Voltage Distortion [THDv]	2% (at 100% Linear Load)
Crest Factor	3:1
Unbalanced Load & Acceptable Load PF	Compatible with Operation on 100% Unbalanced Load 0,9 Leading to 0,9 Lagging without Any Degradation
Overload Operation	10 mins @ 100% ~ 125% Rated Load 60 seconds @ 150% Rated Load Switches to Bypass Line over 150% Rated Load

# Static Bypass

Rated Voltage & Range	380/400/415 VAC 3P+N+PE ±10%	, 5
Rated Frequency & Range	50/60 Hz, ±6% [Adjustable]	

# Communication & Supervision

Model E with 0.9 PF
Standard (Available As Hardware & Software): RS232 Serial
Comm. Port, RS485 (MODBUS) Serial Comm. Port, SNMP Slot,
EPO-Emergency Power OFF Button, Generator Interface,
Programmable 4 pieces Dry Contacts from Front Panel for Any
of The Following Signals: General Alarm, Mains Failure, Battery
Failure, Output Failure, Load on Bypass, Output Overload, High
Temperature

Optional (Standard in Software, Optional as Hardware): SNMP - Network Management Kit [External or Internal], Remote Monitoring & Management Panel, TCP/IP converter, GSM/GPRS Modem, Communication Ports Multiplier.

#### Environment

Remote Monitoring

&Management

Operating Temperature Range Prespecified Operating T. Storage Temperature	0°C - 40°C/20°C -	25°C /-30°C ~ 60°C	
Altitute/ Relative Humidity	< 1000m above sea	evel/ < 95% (non-condensing)	
Noise	< 62 dBA	< 67 dBA	

# Certifications

Safety	EN 62040-1
Electromagnetic Compability [EMC]	EN 62040-2
Performance [VFI-SS-111]	EN 62040-3
Safety	EN 60950-1 Information Technology Equipment
Quality Management	CE, ISO 9001:2015, ISO 14001:2015

# **Optional Features & Accessories**

Isolation Transformer	Optional for Input & Output
Custom Input Voltage Range	Optional
IP Classified Enclosure	Available from IP21 ~ IP 66
Others	Paralelling Kit, Network Management Kit, External Bypass, Remote Monitoring & Management Panel, UPS Looking Battery Enclosuresetc

Physical	UPS Rating [kVA]	160	200	250	300	400
Dimension	s [mm]	980*870*1950		1340*108	0*1950	
Weight [kg	]	570	760	785	875	1000
Protection	Degree	IP20 (Standard)				

Pa	rt Numbers	OUTPUT PF 0.8	OUTPUT PF 0.9	
(A)	160	PXHEIXX16020	PXHEIX916020	
R	200	PXHEIXX20020	PXHEIX920020	
S Rating	250	PXHEIXX25020	PXHEIX925020	
	300	PXHEIXX30020	PXHEIX930020	
Y.	400	PXHFIXX40020	PXHEIX940020	

For More Information on The UPS Pro*Xtend* HE Please Visit www.tsinepower.com