HYUNDAI

ONLINE 1 PHASE UPS









Key features

- True online double-conversion design with high adaptability to harsh mains conditions, IGBT inverter PFC type.
- Real PF 0.9 can provide more power in same space.
- High efficiency results in energy saving.
- Adjustable charging current and flexible battery configuration.
- Optimized changing method to expand battery life time.
- The UPS shall have the following features:
 - Monitors and notify to the user battery status.
 - Display a message on the UPS Display Interface screen to inform user the battery at the end of its service life and consider to replace.
 - Monitors the internal temperature of battery and automatically adjusts the battery charging current and voltage to optimize battery life.
- Automatic bypass transfer or manual bypass transfer for User's control over bypass line.
- Convert into a controlled and regulated DC voltage with power factor correction of rectifier in single phase utility Input.
- Convert DC to AC sine ware in Output converter.
- 110V @ 50% load for minimum start- up AC voltage.
- 300V @ 50% load for maximum start-up AC voltage.



- •Automatic detect additional EBM quantity will simplify EBM installation for IT users
- •Low audible noise at typical load.
- •Embedded Ethernet port solution provide safe network connection to Cloud which will meet the increasing IoT trend.
- •WLAN module for IoT connection.
- •Mobile APP for monitoring, configuration. Support Android/iOS.
- •USB HID enable monitoring on UPS without software installation.
- •Upgraded network card compliance with IEC standard cybersecurity

Typical application ↓ UPS



HYUNDAI UPS - LICENSED BY HYUNDAI CORPORATION, KOREA

ONLINE 1 PHASE UPS



HYUNDAI

New full range double conversion UPS

High density, true double conversion on-line power protection for IT (Information technology) and OT (operation technology) applications. Capable of supporting loads from 1 to 20kVA in a rack/tower convertible form with a 2U/3U space.

These latest range of UPS comes with future-proof connectivity design having the capability to connect to cloud seamlessly

to allow the monitoring of the UPS online through any internet connected device. To ensure users information is safe and protected, these connectivity is compliant with IEC standard cybersecurity and GDPR regulation.

Network connected and data to cloud

- Easy to setup the Safe connection to Cloud
- Connect to Cloud through MQTT protocol (the most widely used IoT protocol)
- Real time health monitoring on the equipment to enable business continuity and failure prevention
- Remote monitoring, scheduled maintenance and UPS firmware upgrade *
- Improve the data visibility to the service people and end user
- Reduce the responsive time on product failure as Cloud push the exact information to end user and service people at the same time
- Create value added service opportunities based on digitalization transformation
- * Will be launched soon









HYUNDAI UPS - LICENSED BY HYUNDAI CORPORATION, KOREA



Product specification

1phase Rackmount online IoT series 3KVA

Modelname		HD-3KRT2U
General	Technology	True online double conversion technology with PFC type
	Design	Rack-mount 19"; 2U
	Capacity	3000VA/2700W
Efficiency	Rated load mode	93% (97% at ECO mode)
Input performance	Rated voltage	220/230/240V
	Voltage range	160-300V (100% load, online mode) 110-300V (derating to 50% load linearly, online mode)
	Rated frequency	50Hz/60Hz(auto- sensing)
	Frequency range	40~70Hz (Online mode); 45Hz-55Hz or 54Hz-66Hz(@ load>60%)
	PF	≥0.99 (for full 100% resistive load at 230 Vac)
	Surge Energy Rating	600J
	THDi	<3% linear load; <5% non linear load
Bypass	Voltage range	184-253V
	Bypass frequency range	±1Hz; ±3Hz; ±5Hz (selectable)
	User's control over	Automatic bypass transfer or manual bypass transfer
	Input circuit breaker	204
	Rated voltage	230V(default): 208/220/230/240Vac (selectable)
		+1%
	Rated frequency	50Hz/60Hz (selectable)
	Erequency range	Synchronized with utility in main mode: +0.1Hz in battery mode
		3kVA/2 7kW
		0.0
Output performance	Power Factor Pating	0.5 1
		0.5-1
	Leakage current	≤U. IDMA <1% linear lead: <5% non linear lead
	Iransfer time	Ums @line⇔battery; 4ms @ line ↔ bypass
	Crest Ratio	max 3:1
	Wave form	Pure sinewave
	Overload	100% <load≤105% 105%<="" 5="" continuous;="" for="" load="" minutes;<br="" ≤125%="">125<load≤150% 30="" for="" seconds;="">150% for 500ms</load≤150%></load≤105%>
	Short-circuit current	699A/7ms (Bypass mode)
	(RMS)/	54A/100ms (Normal/ Battery mode)
Output connection	Protect time	1 main outlet group(with IEC C13*6+IEC C19*1)
Battery and charger		72V
	Capacity(AH)	12100.41*6
	Backup time at full load	1277ATT0
	Backup time at 100000	4~0 111115
	Backuptime at 1800w	27 minutes
	Туре	VRLA (Sealed lead-acid maintenance free battery)
	Charging current	1.5A (8A for external model)
	Charger	Temperature compensated battery charging
	Recharging time	3h to 90%
	External battery module	Maximum connect 4 module
	Operating modes	Online, battery, bypass, high efficiency

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Panel monitor Solutions control functions displayed on graphical LCD : SEGMENAL CD : SEG	Operating	Protections	When UPS Short-circuit, overload, overvoltage, undervoltage, low battery, fan failure
Operating Solidas Control function support on graphical LCD Solidas Control function support Operating Control & Interface The control of UPS and fault detection logic is microcontroller-based; Graphical LCD Dipslay with Manage, warning, monitor and measurements Ups operations. Load, IoT status, Josef Time, Even (top, Sackup, Energy, Sackap,		Danal manitar	Auto transfer to bypass when OPS overtoad and fault.
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HMI LED with flash and sounds when wrong shutdown, low battery with replacement time, overload, fault. Alarms for UPS status: Low battery state, overload condition, on battery state, alarm state; event bypass state; short circuit; overload; DC voltage fault; temperature over limits; changer fault; battery in conditions on battery state, overload; DC voltage fault; temperature over limits; changer fault; battery in to anotextify. UPS shall be able to shutdown in conditions Normal start-up; Start-up by energy of battery in the absent of utility; up in conditions on shutdown ria network(SNMP). UPS shall be able to shutdown in conditions Normal start-up; Start-up by energy of battery in the absent of utility; alus obuitdown in conditions on shutdown ria network(SNMP). UPS shall be able to shutdown in conditions Normal shutdown; Normal start-up; Start-up by energy of battery in the absent of utility; up in conditions on shutdown ria network(SNMP). UPS shall be able to shutdown in conditions Nato shutdown ria network(SNMP); Emergency shutdown (EPO)/RS22 USB USB 2.0 with HD power device RS22 Yes(DBP) Dry in/out 1 programble dry in; 1 programble dry out RPO/EPO Optional Contact interface Yes Modus card Optional, SMP/INC long card Modus card Optional, SMP/INC long card Winpower software <td< td=""><td>Graphical LCD Display with Manage, warning, monitor and measurements UPS operations: Load, IoT status, Date/Time, Event log, backup time, voltage, frequency, battery status, current alarms, bypass mode, load segment, fault</td></td<>			Graphical LCD Display with Manage, warning, monitor and measurements UPS operations: Load, IoT status, Date/Time, Event log, backup time, voltage, frequency, battery status, current alarms, bypass mode, load segment, fault
Harms for UPS status: Low battery state, overload condition, on battery state, alarm state; event. UPS shall be able to stat: up in conditions Normal start-up; Start-up by energy of battery in the absent of utility; up in conditions UPS shall be able to shat: up in conditions Normal start-up; Start-up by energy of battery in the absent of utility; up in conditions UPS shall be able to shutdown in conditions Auto restart; Remote start-up; Start-up by energy of battery in the absent of utility; up in conditions UPS shall be able to shutdown in conditions Auto shutdown after specific-period discharge: this period can be specified by the user; No-load shutdown; UPS will shutdown, if load is less than threshold; Remote shutdown in an entowris(NWP); Emergency shutdown (PD)/RS232 US8 US8 2.0 with HID power device RPO/EPO Optional Contact interface Yes(DB9) Puriout 1 programble dry in; 1 programble dry out RPO/EPO Optional, CMC/Modus: Long Card Relay contactor card Optional, SMMP/IMC long Card Relay contactor card Optional, SMMP/IMC long Card Winpower software User shall be able to communicate with UPS val US9 or RS222 or SMP port Physical performance Dimension(WDPH)MM 43876096.2(20) Physical performance Dimension(WDPH)MM 43876096.2(20			LED with flash and sounds when wrong shutdown, low battery with replacement time, overload, fault
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Specifications are subject to change without prior notice