



HTL Series High Frequency Online UPS











Product snapshot:

Model: 10 ~ 200KVA

Nominal voltage: 380 / 400 / 415VAC

Frequency range: 50/60Hz

Output Power factor: 0.9/1.0

Reduce the investment cost with high efficiency technique:

HTL Series UPS represents the best solution that is both cost effective and flexible configuration. It delivers an excellent integrated autonomy, small footprint and power efficiency of up to 96% with the design of three level inverter topology.

Key Features

- · True double-conversion
- · DSP technology guarantees high performance
- Output power factor 0.9/1.0
- · Wide input voltage range
- Active power factor correction in all phases with PF ≥ 0.99 and THDi ≤ 2%
- 50Hz/60Hz frequency converter mode
- · ECO mode operation for energy saving
- Modular Subsystem design for convenice of field maintenance
- Support EPO, in the event of an emergency, user can shut off UPS rapidly
- Generator compatible
- Intelligent battery management to prolong battery life-span
- Battery temperature compensation option available
- Maintenance bypass available
- Full protection, including back feed protection and battery leakage protection
- 7 inch multicolor LCD touch screen

High Reliability

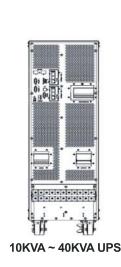
- Its cut-edge digital control technology of DSP (Digital Signal Processor) can deliver higher quality, performance and reliability
- High adaptability for various loads, even 100% unbalance loads, inductive loads or capacitive loads.
- Powerful Interference immunity capability in compliance with requirements of Safety: IEC/EN62040-1, IEC/EN 60950-1 and EMC: IEC/EN62040-2, IEC61000-4-2, IEC 61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8.

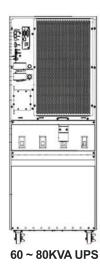
Parallel Redundancy Function

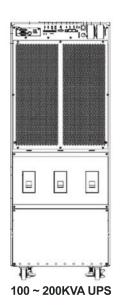
- Built-in parallel kit, realize the parallel extension and redundancy function and offer more flexibility and safety for future power requirement planning
- Support expanded capacity operations (N+X) with up to 6 units in parallel
- Support batteries sharing for the UPS in parallel

Exellent Communication and Power Management

- Provide standard RS485, RS232, USB interface and communication for local or remote power management
- 2 slots intelligent for the installation of optional communication accessories such as SNMP and dry contact card
- Built-in one set dry contact NC/NO relay (selectable internal bypass / battery low voltage)









HTL Series Online UPS 10KVA to 80KVA (3-Phase / 3-Phase)

Technical Specifications

Model Capacity		HTL10K-33	HTL15K-33	HTL20K-33	HTL30K-33	HTL40KS-33	HTL60KS-33	HTL80KS-33			
		HTL10KS-33 10KVA	HTL15KS-33 15KVA	HTL20KS-33 20KVA	HTL30KS-33 30KVA	40KVA	60KVA	80KVA			
Input											
Nominal Voltage	9			3	30 / 400 / 415Vac (3Ph+N-	PE)					
Operating Volta	4555			38	208~478Vac	,					
Operating Frequency Range		45 ~ 55Hz at 50Hz / 54 ~ 66Hz at 60Hz (auto sensing) 40 ~70Hz									
		45 ~ 55Hz at 50Hz / 54 ~ 66Hz at 60Hz (auto sensing) 40 ~ 70Hz ≥ 0,99									
Power Factor				200V M		00/ 1450/ 1200/					
Bypass Voltage Range		380Vac Max voltage: +25% (optional +10%, +15%, +20%)									
		400Vac Max voltage: +20% (optional +10%, 15%)									
		415Vac Max voltage:+15% (optional +10%)									
Dimaga Francisco Dames		Min voltage: -45% (optional -20%, 30%)									
Bypass Frequency Range		Frequency synchronize tracing range: ±10%									
ECO Range		Same as bypass									
Harmonic Distor	rtion (THDi)				≤3% (100% non-linear lo	ad)					
Output											
Output Voltage		380 / 400 / 415Vac (3Ph+N+PE)									
Power Factor		1.0									
Voltage Regulat	tion	±1%									
Frequency	Line Mode	±1% / ±2% / ±4% / ±5% / ±10% of the rated frequency (optional)									
oquency	Bat. Mode	50 / 60 (±0.1%) Hz									
Crest Factor		2.			3:1						
	- CUD	≤2% with linear load									
Harmonic Distor	rion (THD)	≤5% with non linear load									
Efficiency		93.50%			94.50	690-0					
Battery											
		Standard Model:			Standard Model:						
		±120Vdc (20pcs	Standard Model: ±	120Vdc (2x20pcs	120Vdc (3x20pcs						
		12V / 9AH);	12V / 9AH)		12V9AH;	Optional Voltage: ±192V / ±204V / ±216 / ±228V ±240Vdc (32 / 34 / 36 / 38 / 40 pcs optional)					
Battery Voltage		S-Model:	S-Model Optional	Voltage:	S-Model Optional						
Dattery voltage		±96V / ±108V /	±96V / ±108V / ±1;	14.00 (14.00 A) (14.00 A)	Voltage: ±96V /						
		STREET, STREET			(0.000000000)						
		120Vdc (16 / 18 /	(16 / 18 / 20pcs op	otional)	±108V / ±120Vdc						
640 E005 CO. (1794 CO.)	14000	20pcs optional)			(16/18/20pcs optional)						
Charge Current		Standard Model:	SANEA ASSES MANAGEMENT IN		Standard Model:	200.0256-1	0.000	97554			
(charge current to battery capac	can be set according ity installed)	1.35A	Standard Model: 2	.7A	4.05A	15A _{max}	30A _{max}	30A _{max}			
	00. * 10.000 00.000 1 40.000 1 4 0.000 1 40.000	S- Model: 10A _{max}	S-Model: 10A max		S-Model: 15A max	¥					
System Feature	es										
Transfer Time		Utility to Battery: 0ms; Utility to bypass: 0ms									
Overload			Load ≤110%	o: last 60mins, ≤125	%: last 10mins, ≤150%: l	ast 1min, ≥150% ch	nange to bypass				
Short Circuit		Hold Whole System									
12) 25 M		USB, RS232, RS485, Parallel port, REPO port, Coupler dry contact, Intelligent slot,									
Communication		SNMP card (optional), Relay card (optional). LBS port (only 60~80K)									
Environmental											
Operating Temp	perature				0 ~ 40°C						
Storage Temper		-25 ~ 55°C (No Battery)									
Humidity Range		0 ~ 95% (Non Condensing)									
Altitude		<1500m. When >1500m, lower the rated power for use									
Noise Level		<55dB <58dB <63dB									
Physical					CONTRACTOR			2000			
Weight (KG)		129/35	186/39	187/40	236/43	239/46	118	122			
	Standard UPS Module	120133	100/38	250x828x86i		200140	110	122			
Dimension W*D*H (mm)		-					360x8	28x868			
W*D*H (mm) S-Model UPS Module				250x580x65							
Standards		T ²				Andrews and the second					
Standards Safety EMC					C / EN62040-1, IEC / EN60			and a			



HTL Series Online UPS 100KVA to 200KVA (3-Phase / 3-Phase)

Technical Specifications

Model		HTL100KS-33	HTL120KS-33	HTL150KS-33	HTL160KS-33	HTL200KS-33							
Capacity		100KVA	120KVA	150KVA	160KVA	200KVA							
Input		Je	· · · · · · · · · · · · · · · · · · ·	2									
Nominal Voltage	e		38	0 / 400 / 415Vac, (3Ph+N+P	E)								
Operating Voltage Range		138~485Vac for 40% load; 305~485Vac for full-load											
Operating Frequency Range		40 ~ 70Hz											
Power Factor		≥ 0.99											
Harmonic Distortion (THDi)		≤3% (100% linear load)											
		220Vac Max voltage: +25% (optional +10%, +15%, +20%)											
		230Vac Max voltage: +20% (optional +10%, 15%)											
Bypass Voltage Range		240Vac Max voltage:+15% (optional +10%)											
		Min voltage: -45% (optional -20%, 30%)											
		Frequency synchronize tracing range: ±10%											
Generator Input				Support									
Output													
Output Voltage		Ì	38	0 / 400 / 415Vac (3Ph+N+Pl	E)								
Power Factor		0.9 & 1.0											
Voltage Regula	tion	±1%											
		1) Line Mode: Synchronize	with input; when input frequ	uency >±10% (±1%/±2%/±4%	%/±5% optional), output (50	0/60±0.1) Hz							
Output Frequen	ncy	2) Battery Mode: (50/60±0.1) Hz											
Crest Factor		3:1											
011 AT-4014	Section Technological Section 1	≤1% with linear load											
Harmonic Disto	rtion (THD)	≤4% with non linear load											
Efficiency		\$\infty 4\% \text{ with non linear load}\$ 96\%											
Battery		1											
		Optional Voltage: ±1	80V/±192V/±204V/±216/±2	228V/±240V/±252V/±264V/±	276V/±288/±300Vdc (30/32	2/34/36/38/40/42/44							
Battery Voltage		46/48/50pcs optional); 360Vdc~600Vdc (30~50pcs, 36pcs default, 36 to 50 pcs output power factor 1.0; 32~34 pcs output											
		power factor 0.9; 30 pcs output power factor 0.8)											
Charge Current	(A)												
(charge current can be set according to battery capacity installed)		40A	max	60A _{max}									
System Featur	es												
Transfer Time			Utility to	Battery: 0ms; Utility to bypa:	ss: 0ms	Utility to Battery: 0ms; Utility to bypass: 0ms							
	INV Mode	110% overload for 60mins; 125% overload for 10mins; 150% overload for 1min											
Overload	Domain Made	135% overload for long time; >1000% overload for 100 ms											
Overload	Bypass Mode				Turk (1978) (TO) (1971) Algori Estato (1974) (H. 1976) (1976).								
80 Nov 400 N					Turk (1978) (TO) (1971) Algori Estato (1974) (H. 1976) (1976).								
Overload Backfeed Prote Alarm			135% overload	for long time; >1000% overlo	oad for 100 ms								
Backfeed Prote			135% overload Overload, uti	for long time; >1000% overlo Support	oad for 100 ms tery low, etc								
Backfeed Prote Alarm Protection			135% overload Overload, uti	for long time; >1000% overlo Support lity abnormal, UPS fault, bat	oad for 100 ms tery low, etc								
Backfeed Prote Alarm Protection Remote LCD	ection	USB, RS232, RS488	135% overload Overload, uti	for long time; >1000% overlo Support lity abnormal, UPS fault, bat id, over temperature, battery	tery low, etc	elay card (optional)							
Backfeed Prote Alarm Protection Remote LCD Communication	tetion	USB, RS232, RS488	135% overload Overload, uti	for long time; >1000% overle Support ility abnormal, UPS fault, bat id, over temperature, battery Support	tery low, etc	elay card (optional)							
Backfeed Prote Alarm Protection Remote LCD Communication Environmental	n	USB, RS232, RS488	135% overload Overload, uti	for long time; >1000% overle Support ility abnormal, UPS fault, bat id, over temperature, battery Support	tery low, etc	elay card (optional)							
Backfeed Prote Alarm Protection Remote LCD Communication Environmental Operating Temp	n I perature	USB, RS232, RS485	135% overload Overload, uti	for long time; >1000% overle Support ility abnormal, UPS fault, bat id, over temperature, battery Support y contact, Intelligent slot, LBS	tery low, etc	elay card (optional)							
Backfeed Prote Alarm	n I perature	USB, RS232, RS488	Overload, uti Short circuit, overloa , Parallel port, Coupler dry	for long time; >1000% overle Support lity abnormal, UPS fault, bat id, over temperature, battery Support v contact, Intelligent slot, LBS 0 ~ 40°C	tery low, etc	elay card (optional)							
Backfeed Prote Alarm Protection Remote LCD Communication Environmental Operating Tempe Storage Tempe	n I perature	USB, RS232, RS488	Overload, uti Short circuit, overloa , Parallel port, Coupler dry	for long time; >1000% overle Support lity abnormal, UPS fault, bat id, over temperature, battery Support contact, Intelligent slot, LBS 0 ~ 40°C -25 ~ 55°C (No Battery)	tery low, etc	elay card (optional)							
Backfeed Prote Alarm Protection Remote LCD Communication Environmental Operating Tempe Storage Tempe Humidity Range	n I perature	USB, RS232, RS485	135% overload Overload, uti Short circuit, overload i, Parallel port, Coupler dry	for long time; >1000% overless Support dity abnormal, UPS fault, bat and, over temperature, battery Support contact, Intelligent slot, LBS 0 ~ 40°C -25 ~ 55°C (No Battery) 0 ~ 95% (Non Condensing)	tery low, etc	elay card (optional)							
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Backfeed Prote Alarm Protection Remote LCD Communication Environmental Operating Tempe Humidity Range Altitude Noise Level Physical	n I perature	<60	Overload, uti Short circuit, overloa i, Parallel port, Coupler dry	for long time; >1000% overless Support lity abnormal, UPS fault, battery d, over temperature, battery Support contact, Intelligent slot, LBS 0 ~ 40°C -25 ~ 55°C (No Battery) 0 ~ 95% (Non Condensing) <1500m. When >1500m <62dB	tery low, etc low, fan fault alarm S, SNMP card (optional), R	<64dB							
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