OTL-MODULAR SERIES



Online UPS High frequency Modular 40KVA to 800KVA (Three Phase in and Three phase out)

OTL MODULAR Series Energy efficiency with superior electrical protection

To save the wasted power of underutilized, over-size ordinary UPS, and obtain "N+1" redundancy to ensure the critical system has high power availability, data centers now choose modular UPS as their first choice for critical power protection. With compact size, high efficiency, and easy expansion according to power requirements. Modular UPS systems are growing fast in the three-phase market.

The OTL-MODULAR series is a modular uninterruptible power supply (UPS) for medium - and large-sized data centers. It features high efficiency (96%) and a high input factor of 0.99, minimizing UPS energy consumption. The modular design and the N+X parallel redundancy technology, make the expansion & management easier as well as reduce initial acquisition costs.

It supports hot-swappable reduces maintenance time to 5 minutes and improves system availability. The maximum capacity can be expanded to 1000KVA according to future needs, helping to lower initial investment.

General Features

- Adopting digital control design, and the control system is more reliable
 - High input factor 0.99 and output factor 1.
 - 3-level topology design, efficiency is up to 96%
- Support parallel expansion for cabinets, and parallel expansion is up to 4-6 cabinets.
 - Battery number of each group can be selected from 30 pieces to 50 pieces.
 - With 7 inches (standard) and 10 inches (optional) colorful touch LCD screen.



Technical Specifications

MODULAR MODEL		OTL-M40	OTL-M50
CABINET MODEL		OTL-CM-200/320/400	OTL-CM-200/300/400/500/600/800/1000
MODULAR CAPACITY		40 KVA	50KVA
CABINET CAPACITY		200 KVA to 400 KVA	200 KVA to 1000 KVA
MAX. NUMBER		5/8/10	4/6/8/10/12/16/20
INPUT	Rated voltage	Three-phase 3 x 380 V / 3 x 400 V / 3 x 415 V (3Ph+N+PE)	
	Voltage range	138~305Vacfor 40% Load; 305~485Vac for 100% Load	
	Rated frequency	40Hz-70Hz	
	THDi	<3%	
	Power factor	> 0.99	
OUTPUT	Rated voltage	Single-phase Three wire (10+N+PE) 220 / 230 / 240VAC	
	THDv (linear load)	≤1% with linear load; ≤3% with nonlinear load	
	Power factor	1	
	Frequency	50 / 60 Hz <u>±</u> 1%	
	On-line performance	Up to 96%	
MANUAL BYPASS	Туре	Uninterrupted	
STATIC BYPASS	Туре	Static thyristor	
	Voltage (V)	Three-phase 3 x 380 V / 3 x 400 V / 3 x 415 V (3Ph+N+PE)	
	Transfer time	Nil	
	Input	Independence	
	Frequency	50 / 60 Hz	
BATTERY	Battery type	Pb-Ca, VRLA, lead acid, gel, Ni-Cd, Li-lon	
	Rated voltage	Optional Voltage: ±180/192/204/216/228/240/252/264/276/288/300Vdc (30/32/34/36/38/40/42/44/46/48/50pcs optional); 360Vdc-600Vdc (30-50 pcs, 36 pcs default, 36-50 pcs no power derating; 32-34 pcs output power factor 0.9; 30 pcs output power factor 0.8)	
	Charging voltage regulation	Batt-Watch	
	Power module charge current	20A (max.)	
COMMUNICATION	Communication Interface	RS232, RS485, Parallel, LBS, BMS, Dry contact port, Relay card (optional), SNMP card (optional), Battery temperature sensor (optional)	
FEATURES	Transfer time	Utility to Battery : Oms; Utility to bypass: Oms	
	Overload (Line mode)	≤110%, 60min; ≤125%, 10min; ≤150%,1min; to bypass. >150% Shut down Immediately.	
	Overload (Bypass mode)	135% overload for long term; >1000% overload for 100 ms	
	Overheat	Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately	
	Low battery voltage	Alarm and Switch off	
	Self-diagnostics	Upon Power On and Software control	
	Backfeed	Support	
	EPO	Shut down UPS immediately (turn to bypass optional)	
	Battery	Advance Battery Management	
	Noise Suppression	Comlies with EN62040-3	
	Audible & Visual alarms	Line Failure, Battery Low, Overload, System Fault	
	Status LED & LCD display	Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault	
	Reading on the LCD display	Input, Output, Battery, Command, Setting, Maintenance	
GENERAL	Operating temperature	0∘C to +40∘C	
	Relative humidity	Up to 95%, non-condensing	
	Maximum operating altitude	< 1500 m	
	Acoustic noise at 1 meter	< 60 dB	
STANDARD	Safety	EN-IEC 62040-1	
	Electromagnetic compatibility	EN-62040-2	
	Operation	VFI-SS-11 (EN-62040-3)	
	Corporate certification	ISO 9001, ISO 14001, ISO 45001	
PHYSICAL	Dimensions (L x W x H) mm UPS Cabinet	200/320kVA: 600×850×2000 400kVA: 1200×850×2000	200/300/400kVA: 600×850×2000
	Dimensions (L x W x H) mm Power Module	440 x 620 x 130	
PHYSICIAL	·		200kVA: 240; 300kVA: 260; 400kVA: 290;
PHYSICAL	Net weight (kg) UPS Cabinet	210~460	500kVA: 480; 600kVA: 540; 800kVA: 960; 1000kVA: 1050

*information subject to change without prior notice

