



UNIL 1kVA-3kVA

Online UPS Models

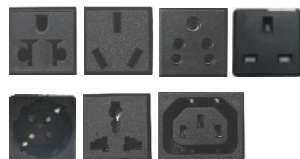
UNIL series operates with programmable power management outlet along with the availability of hot standby feature and it's static bypass improves its reliability. The SNMP card is also available on demand as an option. This series is based on High Frequency Double Conversion IGBT technology with static bypass which improves reliability and consists of advanced PFC technology or battery management. The fixed output frequency can be synchronized with the input frequency.

Features

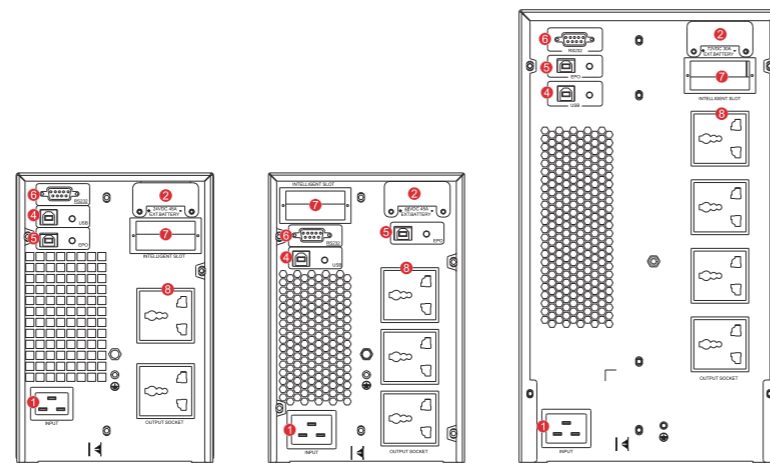
- High frequency on-line double conversion technology
- DSP (Digital signal processing) control technology
- Active power factor correction (APFC), input power factor up to 0.99
- Output power factor 0.9
- Wide input voltage range (110V ~ 300Vac)
- Auto sensing frequency
- 50 / 60 Hz frequency conversion
- Digitally controlled charger, charging voltage and current configured by demands
- High charging current available (Max. 12 A)
- Cold start
- Rear ventilation design and variable speed fan
- Effective software and hardware protection
- Quick and stable charging, 90% capacity restored in 3h (standard model UPS)
- Linear derating in low voltage input reducing battery discharging times
- Advanced battery management (ABM)
- Multiple functions settable via LCD: output voltage, EOD, auto-start, bypass mode, ECO mode
- Multi-platform communications: RS232 (standard), USB / RS485 / SNMP / dry contacts (optional)
- Optional USB, RS485 card, AS400 dry contacts, SNMP card, SMS alarms, EPO function

Rear Panel

1. AC input socket
2. Battery connector (Optional)
3. Fan
4. USB (Optional)
5. EPO (Optional)
6. RS232
7. Intelligent slot (Optional)
8. Output sockets



Optional outlets



1KS / 1KH

2KS (DC48V) / 2KH / 3KH

2KS (DC72V) / 3KS

Specifications

MODEL	UNIL - 1K		UNIL - 2K				UNIL - 3K					
Capacity	1 kVA / .9 kW		2 kVA / 1.8 kW				3 kVA / 2.7 kW					
INPUT												
Rated voltage	208 / 220 / 230 / 240 Vac											
Voltage range	110 ~ 176 Vac (linear derating between 50% and 100% load); 176 ~ 280 Vac (no derating); 280 ~ 300 Vac (derating 50%)											
Frequency	50/60 Hz ± 5 Hz (auto-sensing)											
Power factor	≥ 0.95					≥ 0.99						
Bypass voltage range	- 40% ~ +20% (settable)											
Rated input frequency	50 Hz / 60 Hz (auto-sense)											
THDi	≤ 5%											
OUTPUT												
Voltage	208 / 220 / 230 / 240 Vac (settable via LCD)											
Isolation Transformer	Internal / External											
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz (synchronized range); 50 / 60 Hz ± 0.1 Hz (battery mode)											
Waveform	Sinusoidal											
Power factor	0.9											
THDv	≤ 2% (linear load), ≤ 5% (non-linear load)											
Crest factor	3:1											
Overload	105% ~ 110% for 30 min, 110% ~ 130% for 10 min, 130% ~ 150% for 30s, > 150% for 500 ms											
BATTERIES												
Battery type	Sealed lead acid maintenance free battery											
DC voltage	24V (S)	24V (H)	36V (S)	36V (H)	48V (S)	48V (H)	72V (S)	72V (H)	72V (S)	72V (H)	96V (S)	96V (H)
Inbuilt battery	2×9Ah	/	3×7Ah	/	4×9 Ah	/	6×7 Ah	/	6×9 Ah	/	8×7 Ah	/
Charging current (max.)	12 A (1 ~12A settable)											
Recharge time	Standard model: 90% capacity restored in 3 hours; Long time model: depend on the capacity of battery											
SYSTEM												
Efficiency	≥ 93.5% (Mains mode)	≥ 93.5% (Mains mode)	≥ 94.5% (Mains mode)	≥ 94.5% (Mains mode)	≥ 94.5% (Mains mode)	≥ 95.5% (Mains mode)						
	≥ 89% (Battery mode)	≥ 90% (Battery mode)	≥ 91% (Battery mode)	≥ 92.5% (Battery mode)	≥ 92.5% (Battery mode)	≥ 93% (Battery mode)						
	≥ 98.5% (ECO mode)	≥ 98.5% (ECO mode)	≥ 99% (ECO mode)	≥ 99% (ECO mode)	≥ 99% (ECO mode)	≥ 99% (ECO mode)						
Transfer time	Mains mode to battery mode: 0 ms Inverter mode to bypass mode: 4 ms (typical)											
Protections	Short-circuit, overload, overtemperature, battery discharge protection and fan testing protection											
Communication port	RS232 (standard), USB / RS485 / SNMP/ dry contacts (optional)											
Display	LCD + LED											
ENVIRONMENT												
Operating humidity	0 ~ 95 % RH @ 0 ~ 40°C (non-condensing)											
Storage temperature	-25°C ~ 55°C (exclude batteries)											
Operating altitude	≤ 1000m, above 1000m, derating 1% for each additional 100 m											
IP rating	IP 20											
Noise level at 1m	≤ 50 dB											
OTHERS												
Dimensions (W×D×H) (mm)	144 ×312 ×216	144 ×312 ×216	144 ×371 ×216	144 ×312 ×216	144 ×417 ×216	144 ×417 ×216	191 ×419 ×335	144 ×417 ×216	191 ×419 ×335	144 ×417 ×216	191 ×419 ×335	144 ×417 ×216
Packaged dimensions (W×D×H) (mm)	230 ×402 ×315	230 ×402 ×315	230 ×460 ×315	230 ×402 ×315	230 ×506 ×315	230 ×506 ×315	277 ×500 ×435	230 ×506 ×315	277 ×500 ×435	230 ×506 ×315	277 ×500 ×435	230 ×506 ×315
Net weight (kg)	8.8	4.0	10.9	4.0	15.9	6.1	21.4	6.1	23.8	6.5	25.6	6.5
Gross weight (kg)	9.8	5.1	12.1	5.1	17.3	7.5	23.1	7.5	25.6	8.0	27.3	8.0

- Derate capacity to 90% when the output voltage is adjusted to 208Vac.
- S means standard model, H means long time model.
- All images and specifications are subject to change without notice.
- Custom-made specifications are acceptable.