1

UDC SERIES 1~3kVA 1:1 phase PF: 1.0 (PF0.9, 0.8 Optional)

FEATURES

- Online double conversion
- Wide input voltage range (110~300Vac)
- Input power factor 0.99 (With PFC)
- Output power factor 0.9
- Maximum charging current 12A (Long run unit)
- Charging current can be set by LCD
- 50Hz/60Hz frequency converter mode
- Emergency power off function (EPO)
- Eco mode operation for energy saving (ECO)
- Generator compatible
- SNMP / USB / RS232 multiple communications
- Smart battery charging design for optimized battery performance
- Selectable output voltage: 200, 208, 220, 230, 240Vac
- Low priority load disconnection function
- Smart battery charging design for optimizing battery performance
- 1A or 2A charging current can be selected2A charging current is for 2 groups of inside batteries

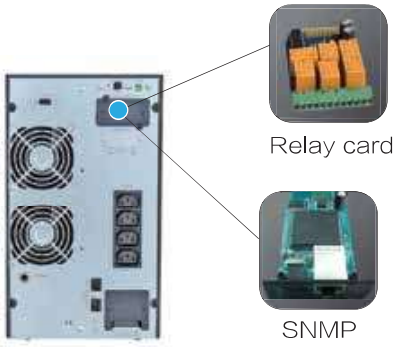
Colourful LCD

Gray LCD

Blue LCD

3 kinds of LCD can be selected

Battery Cabinets.
(Optional)



Relay card

SNMP

1

TECHNICAL SPECIFICATIONS

MODEL		UDC9101S One	UDC9101H One	UDC9102S One	UDC9102H One	UDC9103S One	UDC9103H One
Capacity (VA/Watts)		1000VA / 1000W		2000VA / 2000W		3000VA / 3000W	
Phase		Single phase with ground					
INPUT							
Nominal Voltage		200/208/220/230/240Vac					
Operating voltage range	Low voltage of transferring to bypass	160Vac±5% @100%~80%load 140Vac±5% @80%~70%load 120Vac±5%@70%~60%load 110Vac±5%@60%~0%load (Ambient temp. <35℃)					
	Low threshold voltage of recovering from bypass	175Vac±5% @100%~80%load 155Vac±5% @80%~70%load 135Vac±5% @70%~60%load 125Vac±5% @60%~0%load(Ambient temp. <35℃)					
	High voltage of transferring to bypass	300Vac±5%					
	High threshold voltage of recovering from bypass	290Vac±5%					
Input Voltage Range		55~150Vac or 110~300Vac @ 60% load, 80~145Vac or 160~300Vac @ 100% load					
Operating frequency range		40~70Hz					
Power Factor		0.99					
Generator input		Support					
OUTPUT							
Output Voltage		200/208/220/230/240Vac					
Power Factor		1.0					
Voltage Regulation		± 1%					
Frequency	Line mode (Synchronized range)	47~53Hz or 57~63Hz					
	Bat. mode	(50/60±0.1)Hz					
Crest Factor		3:1					
Harmonic Distortion (THDv)		≤2% THD (Linear load)					
		≤4% THD (Non-linear load)					
Waveform		Pure Sinewave					
TransferTime	AC mode <–>Batt. Mode	Zero					
	Inverter <–> Bypass	4ms(Typical)					
EFFICIENCY							
AC Mode		88%		92%		92%	
Battery Mode		85% 86%	85% 86%	87% 88%	87% 88%	89% 90%	89% 90%
BATTERY							
Battery Type		12V9AH	Depends on the capacity of external batteries	12V9AH	Depends on the capacity of external batteries	12V9AH	Depends on the capacity of external batteries
Numbers		2 3	2 3	4 6	4 6	6 8	6 8
Backup time		Long run unit depends on the capacity of external batteries					
Typical recharging time(Standard mode)		4 hours recover to 90% capacity					
Charging voltage		27.4VDC±1% 41.1VDC±1%	27.4VDC±1% 41.1VDC±1%	54.7Vdc±1% 82.1Vdc±1%	54.7Vdc±1% 82.1Vdc±1%	82.1Vdc±1% 109.4Vdc±1%	82.1Vdc±1% 109.4Vdc±1%
Charging current(max.)		1A / 2A	12A max,can be set by LCD	1A / 2A	12A max,can be set by LCD	1A / 2A	12A max,can be set by LCD
SYSTEM FEATURES							
Line mode Battery mode	Ambient temp.<35℃	105%~110%: UPS transfer to bypass after 10 minutes when the utility is normal 110%~130%: UPS transfer to bypass after 1 minute when the utility is normal 130%~150%:UPS transfer to bypass after 5 seconds when the utility is normal >150%:UPS transfer to bypass immediately when the utility is normal					
	35℃<ambient Temp.<40℃	105%~110%: UPS transfer to bypass after 1 minute when the utility is normal 110%~130%: UPS transfer to bypass after 5 seconds when the utility is normal >130%:UPS transfer to bypass immediately when the utility is normal					
Short circuit		Hold whole system					
Overheat		Line mode: Switch to bypass; Backup mode: Shut down UPS immediately					
Battery low		Alarm and switch off					
EPO (optional)		Shut down UPS immediately					
Audible & Visual alarms		Line failure, Battery low, Over load, System fault					
Communication interface		USB, RS232, SNMP card(optional), Relay card(optional)					
PHYSICAL(Output PF 1.0)							
Dimension W×H×D (mm)		144*209*293	144*209*399	144*209*293	144*209*309	191*337*460	144*209*309	191*337*460	191*337*460
Net Weight (kg)		9.8	14.4	4 4.1	17 27.1	6.7 6.8	27.6 32.8	7.3 7.4
PHYSICAL(Output PF 0.8 or 0.9)							
Dimension W×H×D (mm)		144*209*293	144*209*399	144*209*293	144*209*309	191*337*460	144*209*309	191*337*460	191*337*460
Net Weight (kg)		9.8	14.4	4 4.1	17 27.1	6.7 6.8	27.6 32.8	7.3 7.4
ENVIRONMENT							
Operating temperature		0~40℃					
Storage temperature		-25℃~55℃					
Humidity range		20~90% RH @ 0~40℃ (Non-condensing)					
Altitude		<1500m					
Noise Level		Less than 50dBA at 1 Meter					
STANDARDS							
Safety		IEC/EN62040-1,IEC/EN60950-1					
EMC		IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4,IEC61000-4-5,IEC61000-4-6,IEC61000-4-8					

NOTE: Parameters of battery pack of UDC1-3K is in page 6

1

UDC-RT SERIES 1~3kVA 1:1 phase PF: 1.0 (PF0.9, 0.8 Optional)

FEATURES

- Online double conversion
- Wide input voltage range (110~300Vac)
- Input power factor 0.99 (With PFC)
- Output power factor 1.0
- Optional charging current 1A or 2A for standard unit, 2A charging current is for 2 groups of inside batteries.
- Maximum charging current 12A (Long run unit)
- Charging current can be set by LCD(Long run unit)
- 50Hz/60Hz frequency converter mode
- Emergency power off function (EPO)
- ECO mode operation for energy saving
- Generator compatible
- SNMP + USB + RS232 multiple communications
- Smart battery charging design for optimizing battery performance
- Support lithium battery and BMS
- Selectable output voltage: 200,208,220,230,240Vac
- Low priority load disconnection function
- 8 minutes backup time standard units are optional

Colourful LCD

Gray LCD

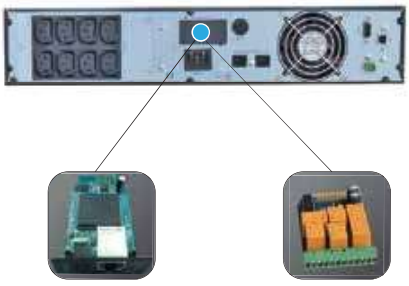
Blue LCD

3 kinds of LCD can be selected

Battery Cabinets. (Optional)

3U for 3KVA standard unit

The LCD panel can be rotated



SNMP

Relay card