UNOMAT INTERNATIONAL

UMC-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

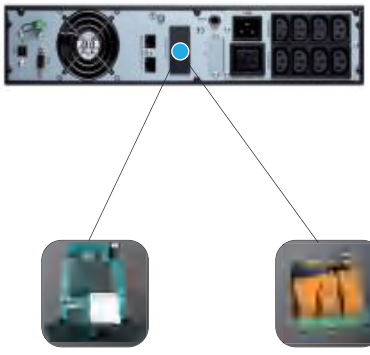
Gray LCD

Blue LCD

3 kinds of LCD can be selected

Battery Cabinets.
(Optional)

The LCD panel can be rotated



SNMP

Relay card

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Technical Specifications:

MODEL		UMC9101S-RT One	UMC9101H-RT One		UMC9102S-RT One	UMC9102H-RT One		UMC9103S-RT One	UMC9103H-RT One	
Capacity (VA/Watts)		1000VA / 1000W			2000VA / 2000W			3000VA / 3000W		
Phase		Single phase with grounde with								
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								
Transfer Time	AC mode <->Batt. Mode	Zero								
	Inverter <-> Bypass	4ms(Typical)								
EFFICIENCY										
AC Mode		88%			92%			92%		
Battery Mode		85%			88%			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	2	3	4	4	6	6	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%	27.4VDC±1%	41.1VDC±1%	54.7Vdc±1%	54.7Vdc±1%	82.1Vdc±1%	82.1Vdc±1%	82.1Vdc±1%	109.4Vdc±1%
Charging current(max.)		1A or 2A	12A max,can be set by LCD		1A or 2A	12A max,can be set by LCD		1A or 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) RJ45, Smart Slot								
PHYSICAL										
Dimension W×D×H (mm)		440*325*86.5			440*460*86.5	440*435*86.5		440*600*86.5/440*460*131	440*435*86.5	
Net Weight (kg)		11.3	5.6	5.6	19.1	8.3	8.3	26.2/25.8	8.6	8.6
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								

8 minutes backup time standard units

MODEL	UMC9101S-RT (UPS)	UMC102S-RT (UPS+EBP)		UMC9103S-RT (UPS+EBP)	
Capacity (VA/Watts)	1000VA / 900W	2000VA / 1800W		3000VA / 2700W	
Phase	Single phase with ground				
BATTERY					
Battery Type	12V9AH-9S	12V9AH		12V9AH	
Numbers	4	8		12	
Backup time	8mins				
Typical recharging time(Standard modle)	8 hours recover to 90% capacity				
Charging voltage	27.4VDC ± 1%	54.7Vdc ± 1%		82.1Vdc ± 1%	
Charging current(max.)	1A / 2A	1A / 2A		1A / 2A	
PHYSICAL					
Dimension W × D × H (mm)	440*430* 86.5	440*435*86.5(UPS)	440*435*86.5(EBP)	440*435*86.5 (UPS)	440*578*86.5(EBP)
Net Weight (kg)	18.2	9.2	26.7	9.8	34.7

System Specifications – UMC1-3K-RT

MODEL(Battery Pack)	UMC-BC24RT	UMC-BC36RT	UMC-BC48RT	UM-CBC72RT	UMC-BC-96RT
Charger input	208/220/230/240VAC				
BATTERY SYSTEM					
Battery Type	Sealed, Maintenance Free, Value Regulated, Lead Acid				
Typical Recharge Time	6~8-hours (to 90% of full capacity)				
Typical Battery Life	3-5 years, depending on discharge cycles and ambient temp				
System Voltage	24VDC	36VDC	48VDC	72VDC	96VDC
Charging current (max)	1.4A				
Battery Quantity	4	6	8	12	8
Capacity (standard unit)	7Ah/9Ah(12V)				
Battery Cable Type	Premolded #12AWG				
ENVIRONMENTAL					
Operating Temperature (max)	0 to 40° C				
Operating/Storage Humidity	0~90% Non-Condensing				
PHYSICAL					
Size - Net W X D X H (mm)	440*430*86.5	440*430*86.5	440*552*86.5	440*720*86.5	440*552*86.5
Weight - Net(kg)	17.4	22.5	28.5	41.1	28.5

System Specifications – UMC1-3K

MODEL(Battery Pack)	UMC-BC24T	UMC-BC36T	UMC-BC48T	UMC-BC-72T	UM-CBC96T
Charger input	208/220/230/240VAC				
BATTERY SYSTEM					
Battery Type	Sealed, Maintenance Free, Value Regulated, Lead Acid				
Typical Recharge Time	6~8-hours (to 90% of full capacity)				
Typical Battery Life	3-5 years, depending on discharge cycles and ambient temp				
System Voltage	24VDC	36VDC	48VDC	72VDC	96VDC
Charging current (max)	1.4A				
Battery Quantity	4	6	8	12	16
Capacity (standard unit)	7Ah/9Ah(12V)				
Battery Cable Type	Premolded #12AWG				
ENVIRONMENTAL	0 to 40° C				
Operating Temperature (max)	0~90% Non-Condensing				
Operating/Storage Humidity					
PHYSICAL					
Size - Net W X D X H (mm)	144*209*399	144*209*399	191*337*460	191*337*460	191*337*460
Weight - Net(kg)	13.5	18.5	28.5	38.5	47.5