



# Professional On-Line & Line-Interactive UPS Solutions True Double Conversion 1.0kVA - 20kVA & 30kVA - 800kVA

Output Power Factor 0.9 - Rack/Tower 2 in 1 Design - LCD Display - Perfect Battery Pack

## Custos Series High-Level Online UPS

2.0 kVA / 3.0 kVA – Output Power Factor 0.9 – Adjustable Charging Current  
Rack/Tower 2 in 1 Design - LCD Display - Single phase - With Batter Pack Solution

Ideal for medium-density power protection demand, Custos 9X+ series provides Rack/Tower form factor to fit diverse environment. Despite its compact footprint, this UPS incorporates internal battery packs which can be accessed via the front panel for maintenance checks and replacement without removing the UPS from its rack mounting. The LCD display panel can be easily shifted by pressing buttons to suit the installation format, vertically stand or flatly rack mount. Besides, IT personnel can manage equipment well from learning remaining backup time information via LCD display.

### Features & Advantages

- True Double-Conversion
- Output power factor 0.9
- Rack/Tower 2 in 1 Design
- Easy-Shift LCD display
- Professional battery box can be used as a rack and also as a tower
- Battery Brand name: Yuasa
- Custos Series works only with external battery pack and offers more current for charging. The charging current is adjustable. (1/2/4/8 A)
- ECO and advanced ECO mode for energy saving.
- Output voltage regulation < 1%
- Higher output crest ratio perfect for generator and compressor
- Programmable power management outlets
- Emergency power off function (EPO)
- Hot swappable battery design
- Reduce your cost and saving up to 250,00 € per UPS solution
- Warranty: UPS 3 years, Battery Pack 2 years
- Replacement in advance in service case
- Warranty Extension and Express Service are available



Custos 2/3 kVA with Battery Bank



Custos 2/3 kVA Rack



2.0 kVA rear view



3.0 kVA rear view



Battery Pack rear view

### Battery Bank for Custos Series 2.0 - 3.0 kVA UPS



BB-48/X-RT (480 x 438 x 88 mm 2U)  
BB-72/X-RT (600 x 438 x 88 mm 2U)

Battery Box	Battery Type	Batteries	Backup Time 100% Load (Min)
BB-48/X-RT	12V / 9Ah	4 or 8 pcs	4.5 or 10.0 Min (2.0 kVA UPS)
BB-72/X-RT	12V / 9Ah	6 or 8 pcs	5.0 or 10 Min (3.0 kVA UPS)

BB-48/X-RT : Suitable for Custos series 2.0 kVA UPS, Battery Pack Voltage :48 V  
BB-72/X-RT : Suitable for Custos series 3.0 kVA UPS, Battery Pack Voltage :72 V  
Backup Time : Please see the following Backup Time Table  
RT: Suitable for Custos Rack & Tower UPS 2 in 1 Design

### Backup Time Table for Custos Series 2.0 - 3.0 kVA UPS

UPS Type	Battery Box	Backup Time	Backup Time with Load (Min)			
			100%	75%	50%	25%
CU-1102RL Rack 2.0 kVA	+ 1xBB-48/9RT (4 x 9Ah Batteries)	Backup Time	4,5	7,2	12,8	27
	+ 1xBB-48/18RT (8 x 9Ah Batteries)	Backup Time	10	17	27	59
	+ 2xBB-48/18RT (16 x 9Ah Batteries)	Backup Time	22	37	56	120
	+ 3xBB-48/18RT (24 x 9Ah Batteries)	Backup Time	33	56	84	181
CU-1102TL Tower 2.0 kVA	+ 4xBB-48/18RT (32 x 9Ah Batteries)	Backup Time	44	75	112	241
CU-1103RL Rack 3.0 kVA	+ 1xBB-72/9RT (6 x 9Ah Batteries)	Backup Time	5	8,3	12,5	30
	+ 1xBB-72/18RT (12 x 9Ah Batteries)	Backup Time	10	18	27	64
	+ 2xBB-72/18RT (24 x 9Ah Batteries)	Backup Time	23	38	56	130
	+ 3xBB-72/18RT (36 x 9Ah Batteries)	Backup Time	35	57	85	196
	+ 4xBB-72/18RT (48 x 9Ah Batteries)	Backup Time	46	76	113	261
CU-1103TL Tower 3.0 kVA						

P	Model	kVA	Form	Datasheet	Brochure	Manual	SNMP Card	Price Info
1	CU-1102-RL	2.0 kVA	Rack					
2	CU-1102-TL	2.0 kVA	Tower	PDF	PDF	PDF	Go to SNMP	Pricelist
3	CU-1103-RL	3.0 kVA	Rack					
4	CU-1103-TL	3.0 kVA	Tower					

### Specification

Model	CU-1102RL/TL	CU-1103RL/TL
Phase	Single Phase with ground	
Capacity	2.0 kVA / 1.8kW	3.0 kVA / 2.7kW

## Input

Voltage Range	55-150 VAC $\pm$ 5% or 110-300 VAC $\pm$ 5%
Frequency Range	40Hz ~ 70Hz
Power Factor	$\geq$ 0.99 @ Nominal Voltage (100% Load)

## Output

Output Voltage	110/115/120/127 VAC or 208/220/230/240VAC
Voltage Regulation	$\pm$ 1%
Frequency range (Synchronized Range)	47Hz ~ 53Hz or 57Hz ~ 63Hz
Frequency Range (Batt. Mode)	50Hz $\pm$ 0.2Hz or 60Hz $\pm$ 0.2Hz
Current Crest Ratio	5:1 (max.)
Harmonic Distortion	$\leq$ 2% THD (Linear Load) ; $\leq$ 8% THD (Non-linear Load)
Transfer Time	Bypass to Inverter Inverter to Bypass
Waveform (Batt. Mode)	Zero 4ms (typical) Pure Sinewave

## Efficiency

AC Line Mode	88%
Battery Mode	85%

## Battery

Long-Run Model	Battery Type / Numbers Charging Current (max.) Float Charging Voltage	Depending on the capacity of external batteries 4.0 A or 8.0 A Default:4.0 A $\pm$ 10%, Max.:6.0A $\pm$ 10%	54,7 VDC $\pm$ 1% 82,1 VDC $\pm$ 1%
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## Indicators

LCD Display	Load Level, Battery level, AC Mode, Battery Mode, Bypass Mode and Fault Indicator
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## Alarm

Battery Mode	Sounding every 4 seconds
Low Battery	Sounding every second
Overload	Sounding twice every second
Fault	Continuously sounding

## AC Input & Output Connectors

AC Input Connector	1 x IEC 320 C20	1 x IEC 320 C20
AC Output Connector	8 x IEC 320 C13	1 x IEC 320 C19 / 6 x IEC 320 C13

## Standards

IEC 62040-1 (Safety)	YES
IEC 62040-2 (EMC)	YES
CE	YES

## Physical dimensions

Long-Run Model	Dimension (mm) Net Weight (kgs)	480 (D) x 438 (W) x 88 (H) 11,3	600 (D) x 438 (W) x 88 (H) 13,8
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## Environment

Humidity	20-90% RH @ 0-40°C (non-condensing)
Noise Level	Less tahn 50dBa @ 1 Meter

## Management

Smart RS-232 / USB	Supports Windows 2000/2003/XP/Vista/2008/7/8, Linux, Unix, and MAC
Optional SNMP	Power management from SNMP manager and web browser

\*Product specifications are subject to change without further notice.