

CUSTOS 9X+ SERIES



High-Level Online UPS

1KVA - 3KVA

Applications:



Data Center



Telecom



Networking



Computer

Professional On-Line UPS Solutions

Ideal for medium-density power protection demand, Power guardian, FSP Custos 9X+ series provides Rack/ Tower to fit diverse environment. Despite its compact footprint, Custos 9X+ 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, vertical stand or horizontal rack mount. Besides, IT personnel can manage equipment well from learning intuitive information via LCD display.

GENERAL FEATURES

- True double-conversion online UPS
- Output power factor 0.9
- User-friendly and easy-shift LCD display
- Rack/Tower design
- Programmable power management outlets for 1k- 3k models
- 50/60 Hz frequency converter mode
- ECO and advanced ECO mode for energy saving
- Emergency Power Off Function (EPO)
- Hot-swappable battery design

True double-conversion online UPS

A true double conversion UPS will rectify input power to offer clean, pure, high level quality power with $\pm 1\%$ voltage output regulation to fully protect mission-critical devices such as sensitive networks, small computer centers servers, telecom applications, as well as for industrial applications.

Output power factor 0.9

Custos 9X+ series is a high-density UPS with output power factor 0.9 to provide higher performance and efficiency to critical applications.

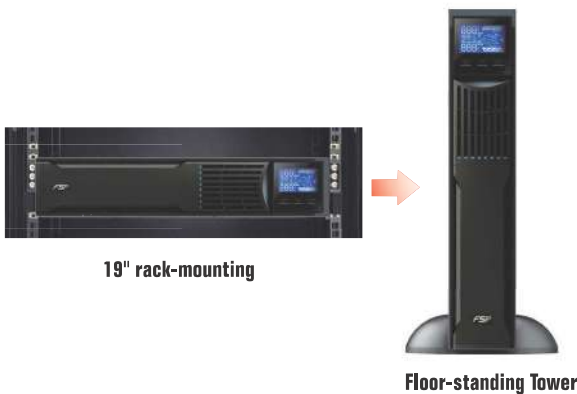
User-friendly and easy-shift LCD display

The front panel digital display can be easily shifted through LCD setting to suit the installation format, vertically stand or flat wall mount.



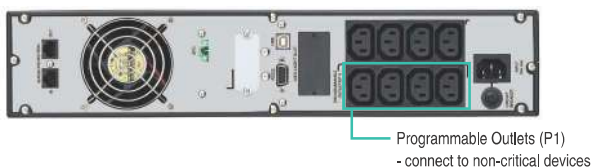
Rack / Tower design

Custos 9X+ series is designed in true universal-mount case. It can be easily installed as floor-standing tower or in 19-inch rackmount bracket.



Programmable power management outlets

With programmable power management outlets, users can easily and independently control load segments. During power failure, this feature will extend battery time to mission critical devices by shutting down the non-critical devices.



50/60 Hz frequency converter mode

Lock output frequency at 50Hz or 60Hz to suit power sensitive equipments.

ECO and advanced ECO mode for energy saving

Thanks FSP Custos9X+ smart design, operation efficiency up to 97% ECO mode implemented. Furthermore, Custos 9X+ 1-3K even offers advanced ECO mode to allow UPS to operate at higher efficiency up to 98% for more energy saving.

In these operation modes, load is supplied by the utility. When utility failure, UPS inverter will assume control the load and provide clean power continuity to the connected devices.



Emergency Power Off function (EPO)

The safety function can guarantee & secure the emergency responders, fire fighters not exposed to dangerous voltage, electrical hazard from the device. This is important if equipment is emitting smoke, fire, or flood, or if person is being electrocuted.

Hot-swappable battery design

This design ensures clean and uninterruptible power to protected equipment during battery replacement.



RJ-45 Surge protector

Custos 9x+ implements RJ-45 Surge Protection ports to prevent Ethernet network damage caused by lightning or ground surges.

Intelligent slot for SNMP or Relay Card



TECHNICAL SPECIFICATIONS

MODEL	CU-1101TS	CU-11015TS	CU-1102TS	CU-1102TL	CU-1103TS	CU-1103TL
PHASE	Single phase with ground					
CAPACITY	1000 VA / 900 W	1500 VA / 1350 W	2000 VA / 1800 W		3000 VA / 2700 W	
INPUT						
Nominal Voltage	208/220/230/240 VAC					
Voltage Range	110-300 VAC \pm 5% @ 50% load ; 160-300 VAC \pm 5% @ 100% load					
Frequency Range	40Hz ~ 70Hz					
Power Factor	\geq 0.99 @ Nominal Voltage (100% load)					
OUTPUT						
Output Voltage	208/220/230/240 VAC					
AC Voltage Regulation (Batt. Mode)	\pm 1%					
Frequency Range (Synchronized Range)	57 ~ 63 Hz or 47 ~ 53 Hz					
Frequency Range (Batt. Mode)	60Hz \pm 0.1Hz or 50 Hz \pm 0.1Hz					
Current Crest Ratio	5:1 (max.)					
Harmonic Distortion	\leq 2 % THD (Linear Load) ; \leq 4 % THD (Non-linear Load)					
Transfer Time	Line mode to Battery mode		Zero			
	Inverter to Bypass		4 ms (Typical)			
Waveform (Batt. Mode)	Pure Sinewave					
EFFICIENCY						
AC Mode	90%		91%		91%	
ECO Mode	97%		97%		97%	
Battery Mode	88%	89%	88%	89%	90%	
BATTERY						
Battery Type	12 V / 9 AH	12 V / 9 AH	12 V / 9 AH	Depending on the capacity of external batteries	12 V / 9 AH	Depending on the capacity of external batteries
Numbers	2	3	4	4	6	6
Typical Recharge Time	4 hours recover to 90% capacity		4 hours recover to 90% capacity		4 hours recover to 90% capacity	
Charging Current (max.)	1 A**	1 A**	1 A**	1A/2A/4A/8A (Selectable via LCD setting)	1 A**	1A/2A/4A/8A (Selectable via LCD setting)
Charging Voltage	27.4 VDC \pm 1%	41.1 VDC \pm 1%	54.8 VDC \pm 1%	54.8 VDC \pm 1%	82.1 VDC \pm 1%	82.1 VDC \pm 1%
INDICATORS						
LCD Display	Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicator					
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 x14		1 x IEC 320 C20		1 x IEC 320 C20	
AC Output Connector	8 x IEC 320 C13		8 x IEC 320 C13		1 x IEC 320 C19 / 6 x IEC 320 C13	
PHYSICAL						
Dimension, D x W x H (mm)	410 x 438 x 88 [2U]	410 x 438 x 88 [2U]	510 x 438 x 88 [2U]	410 x 438 x 88 [2U]	630 x 438 x 88 [2U]	510 x 438 x 88 [2U]
Net Weight (kgs)	12.9	17.6	20.6	11.3	28.0	13.8
ENVIRONMENT						
Humidity	20-90 % RH @ 0- 40°C (non-condensing)					
Noise Level	Less than 50dBA @ 1 Meter					
MANAGEMENT						
Smart RS-232 / USB	Supports Windows 2000/2003/XP/Vista/2008, Windows7/8/10, Linux and MAC					
Optional SNMP	Power management from SNMP manager and web browser					

*Derate capacity to 95% when the output voltage is adjusted to 115VAC, derate capacity to 90% when the output voltage is adjusted to 110VAC and derate capacity to 80% when the output voltage is adjusted to 100VAC/200VAC/208VAC.

**If standard UPS is equipped with additional charger, the available setting options become 2A, 3A and 4A. Product specifications are subject to change without further notice.



Backup Time Table for Custos Series

	Battery Bank	Backup Time with Load (Min)			
		25%	50%	75%	100 %
CU-1101TS	internal battery(2x9Ah Batteries)	24.0	10.5	6.0	3.8
	+1 BB-24/18RT(6x9Ah batteries)	168.0	78.0	52.0	37.0
CU-1102TS	internal battery(4x9Ah batteries)	26.0	11.0	6.1	4.0
	+1 BB-48/18RT(12x9Ah batteries)	98.0	47.0	29.0	20.0
	+2 BB-48/18RT(20x9Ah batteries)	181.0	88.0	54.0	38.0
CU-1103TS	internal battery(6x9Ah batteries)	28.0	11.5	6.3	4.0
	+1 BB-72/18RT(18x9Ah batteries)	107.0	48.0	30.0	20.5
	+2 BB-72/18RT(30x9Ah batteries)	197.0	91.0	55.0	39.0
CU-1102TL	+1 BB-48/18RT(8x9Ah batteries)	60.0	29.0	17.5	11.5
	+2 BB-48/18RT(16x9Ah batteries)	139.0	67.0	41.0	29.0
	+3 BB-48/18RT(24x9Ah batteries)	224.0	110.0	68.0	48.0
CU-1103TL	+1 BB-72/18RT(12x9Ah batteries)	65.0	29.0	17.5	11.5
	+2 BB-72/18RT(24x9Ah batteries)	151.0	68.0	42.0	29.0
	+3 BB-72/18RT(36x9Ah batteries)	244.0	112.0	69.0	48.0

