

# centiel

*continuous power availability*

## EssentialPower™ X1 RT

The Single Phase from 1kVA to 20kVA



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## EssentialPower™, The Single Phase

**EssentialPower™** is The On-Line, true double-conversion, single phase Uninterruptible Power Supply.

From 1 to 20kVA, **EssentialPower™** provides the most flexible and reliable solution ideal for small network devices, servers, point-of-sale, work station clusters and light-industrial installations. EssentialPower™ satisfies any entry-level mission critical application demanding high availability and flexibility.

## Flexibility for Any Application

From 2U to 5U, mono-mono or Tri-mono, **EssentialPower™** can be used as standalone Tower or Rack-mounted UPS on any mission critical application.

**EssentialPower™** offers built-in internal batteries from 1 to 6kVA, and the possibility to connect up-to 4 matching battery cabinets for autonomies of up to 4 hours.

## Benefits

**Standalone Tower or 19”  
Rack-mount configurations**

**Connectivity: USB, RS-232,  
potential-free contacts**

**EPO contact inputs  
for remote shutdown**

**Cold start**

**Parallel operation  
from 6kVA to 20kVA**

**Frequency converter  
operation (50 Hz or 60 Hz)**

**Connect up-to 4 battery  
modules to achieve hours  
of autonomy times**



**kVA=kW**

FROM 6 TO 10 KW



## Connectivity

With a variety of options, like, communication cards, Expansion relays, SNMP and ambient monitoring applications, **EssentialPower™** can be easily integrated into any environment and building management system.

## Reliability

True-Online double conversion, pure sinewave output

Reliable digital power conversion architecture

Wide Range Input Window from 110 - 300Vac

Extended battery life I – U (DIN 41773)

Patented Backup Runtime Estimation on LCD

## Ease of Service

Frontal access battery replacement

Clean and clear user-friendly display

Records event log and alarms up to 500

Personalization & Intelligent Self-diagnostic

Easy Firmware Flash Upgrade

Manual maintenance bypass switch (optional)

## Battery Autonomy

### EssentialPower™ 11RT

	1kVA	2kVA	3kVA	6kVA	10kVA
<b>UPS TYPE</b>	UPS-EP001-11-I03-2U	UPS-EP002-11-I06-2U UPS-EP002-11-I06-3US	UPS-EP003-11-I06-2U UPS-EP003-11-I06-4US	UPS-EP006-11-E-2U UPS-EP006-11-I20-4U	UPS-EP010-11-E-3U
<b>Battery Cabinet</b>	CAB-EPBAT06-I00-2U	CAB-EPBAT12-I00-2U	CAB-EPBAT12-I00-2U	CAB-EPBAT20-I00-3U	CAB-EPBAT20-I00-3U
<b>Battery Type</b>	7Ah / 9Ah	7Ah / 9Ah	7Ah / 9Ah	7Ah / 9Ah	7Ah / 9Ah
<b>UPS</b>	5 / 7	5 / 7	<3 / 4	N.A.	N.A.
<b>UPS + 1 EPBATxx</b>	27 / 35	25 / 32	15 / 20	6 / 8	3 / 4
<b>UPS + 2 EPBATxx</b>	54 / 69	50 / 64	31 / 40	17 / 22	8 / 11
<b>UPS + 3 EPBATxx</b>	83 / 106	77 / 98	49 / 63	30 / 39	15 / 19
<b>UPS + 4 EPBATxx</b>	114 / 146	96 / 135	68 / 87	44 / 57	23 / 29

### EssentialPower™ 31RT

	10kVA	15kVA	20kVA
<b>UPS TYPE</b>	UPS-EP010-31-E-3U	UPS-EP015-31-E-5U	UPS-EP020-31-E-5U
<b>Battery Cabinet</b>	CAB-EPBAT20-I00-3U	CAB-EPBAT20-I00-3U	CAB-EPBAT20-I00-3U
<b>Battery Type</b>	7Ah / 9Ah	7Ah / 9Ah	7Ah / 9Ah
<b>UPS</b>	N.A.	N.A.	N.A.
<b>UPS + 1 EPBATxx</b>	3 / 4	<2 / 2	<1 / 1
<b>UPS + 2 EPBATxx</b>	9 / 12	5 / 7	3 / 4
<b>UPS + 3 EPBATxx</b>	17 / 22	9 / 12	6 / 8
<b>UPS + 4 EPBATxx</b>	25 / 32	14 / 18	9 / 12



2U  
EPBAT12 | EPBAT06



3U  
EPBAT20

\* EssentialPower™ 11 RT: autonomies @ 100%load p.f 0.9  
EssentialPower™ 31 RT: autonomies @ 100%load p.f 0.81

## EssentialPower™ 11RT

	1kVA	2kVA	3kVA	6kVA	10kVA
MODEL	UPS-EP001-11-I03-2U	UPS-EP002-11-I06-2U UPS-EP002-11-I06-3US	UPS-EP003-11-I06-2U UPS-EP003-11-I06-4US	UPS-EP006-11-E-2U UPS-EP006-11-I20-4U	UPS-EP010-11-E-3U
<b>GENERAL DATA</b>					
Output rated power	1000VA /900W	2000VA /1800W	3000VA /2700W	6000VA /6000W	10000VA /10000W
Output power factor	0,9	0,9	0,9	1	1
Topology	Online double conversion				
Internal Batteries	YES	YES	YES	2U: N.A.; 4U: YES	N.A.
Parallel Configuration	N.A.	N.A.	N.A.	Up to 4 units	Up to 4 units
<b>INPUT</b>					
Voltage range	110~300 Vac (Single + G)	110~300 Vac (Single + G)	110~300 Vac (Single + G)	110~280 Vac (Single + G)	110~280 Vac (Single + G)
Frequency range	45-65Hz (auto sensing)			45-70Hz (auto sensing)	
Input power factor	≥ 0.99 @ 100% linear load				
Input Current Distorsion	≤ 6% (full load)	≤ 6% (full load)	≤ 6% (full load)	≤ 3% (full load)	≤ 3% (full load)
<b>OUTPUT</b>					
Output voltage	220/230/240 Vac (Single + G)			200/208/220/230/240 Vac (Single + G)	
Output voltage distortion	<3%@100% Linear Load; <5% @100% Non-Linear Load			<1%@100% Linear Load; <3% @100% Non-Linear Load	
Output voltage regulation	±1%				
Frequency range	±1Hz or ±3Hz (selectable)				
Crest factor	3:1				
Output waveform	Pure sine wave				
Overload Capacity Inverter	<105%continuous 106-120% for 30 seconds transfer to bypass. 121-150% for 10 seconds transfer to bypass.			<105%continuous 105-125% for 600 to 30 seconds transfer to bypass. 125-150% for 30 seconds to immediately transfer to bypass.	
<b>EFFICIENCY</b>					
Line Mode	Up to 92%	Up to 92%	Up to 92%	94%	94%
High Efficiency Mode	≥97%			≥98%	
<b>BATTERY</b>					
Type	VRLA (vented lead-acid)				
Battery Configuration	1x3x7Ah	1x6x7Ah	1x6x7Ah	E: External: 16/18/20 (std) 12-14 (opt) I20: 20x5Ah Internal	E: External, 16/18/20
Charging Current	2.1 A	1.5 A	1.5 A	2 A	2 A
Recharge time (to 90%)	4 hours				
<b>FUNCTIONS</b>					
Multi-Mode	Normal/ ECO/ CVCF				
Audible or Visual	Line failure/ Battery low/ Transfer to Bypass/ System Fault				
Full protection	Overload, Over temperature, Short circuit, Discharge, Overcharge				
DC start	Yes (standard)				
Programmable outlet	Yes (standard)	Yes (standard)	Yes (standard)	N.A.	N.A.
<b>PHYSICAL</b>					
Dimensions (WxHxD,mm)	2U: 440x88x405	2U: 440x88x600 3US: 440x132x432	2U: 440x88x600 4US: 440x176x432	2U: 440x88x685 4U: 440x176x685	3U: 440x132x685
Net Weight (kgs/lbs)	11.7/25.8	21.8/48.1	24.6/54.2	E: 11/24.25 I20: 9/19.8 (5Ahx20)	11/24.25
<b>ENVIRONMENTAL</b>					
Operation Temperature	0~40°C / 32~104°F				
Operation Humidity	20~95%RH (without condensing)				
Altitude	1000m/3280ft without derating				
Noise Level	50dBS @ 1-meter front			≤55dBA @ 1 meter	≤60dBA @ 1 meter
<b>COMMUNICATIONS</b>					
Standard	RS-232, USB, EPO			USB/EPO	
Option	RS485 (Modbus), Dry Contact Relay, SNMP/WEB Card			RS232, RS485, Dry Contact Relay, SNMP/WEB Card	
User Interface	LCD: Input: Voltage/Frequency; Output: Voltage/Current/Frequency/Load %; Battery: Voltage/Autonomy/Temperature				
<b>STANDARDS AND CERTIFICATIONS</b>					
Safety	IEC / EN62040-1			IEC / EN62040-1, UL1778	
EMC	IEC / EN62040-2 (C2)			EN62040-2, EN61000-3-2, EN61000-3-3, FCC Class A	
Performance	IEC / EN62040-3				
Manufacturing	ISO 9001:2015, ISO 14001:2015 / CE, UL, cUL, FCC				



**EssentialPower™ 31RT**

10kVA	15kVA	20kVA
UPS-EP010-31-E-3U	UPS-EP015-31-E-5U	UPS-EP020-31-E-5U
10000VA /9000W	15000VA /13500W	20000VA /18000W
0,9		
Online double conversion		
NO		
Up to 4 units		
277 - 485 Vac (3Ph + N +PE)		
45-65Hz (auto sensing)		
≥ 0.95 @ at linear load		
<3% at linear load		
220/230/240 Vac (Single + G)		
<3%@100% Linear Load; <5% @100% Non-Linear Load		
±1%		
±1Hz or ±3Hz (selectable)		
3:1		
Pure sine wave		
105% - 150% 600sec		
Up to 91%		
≥95%		
VRLA (vented lead-acid)		
E: External: 20		
2 A	4.5 A	4.5 A
External Battery Dependent		
Normal/ ECO/ CVCF		
Line failure/ Battery low/ Transfer to Bypass/ System Fault		
Overload, Over temperature, Short circuit, Discharge, Overcharge		
Yes (standard)		
N.A.		
3U: 440x132x680	5U: 440x220x720	5U: 440x220x720
33 /72.75	35 / 77.1	35 / 77.1
0~40°C / 32~104°F		
20~95%RH (without condensing)		
1000m/3280ft without derating		
50dBS @ 1-meter front		
RS-232, EPO		
USB, RS485 (Modbus), Dry Contact Relay, SNMP/WEB Card		
LEDs + LCD: Input: Voltage/Frequency; Output: Voltage/Current/Frequency/Load %; Battery: Voltage/Autonomy/TemperatureVoltage/Autonomy/Temperature		
IEC / EN62040-1		
IEC / EN62040-2 (C2)		
IEC / EN62040-3		
ISO 9001:2015, ISO 14001:2015 / CE, UL, cUL, FCC		



**2U**  
1-6 kVA



**3U**  
10kVA



**4U**  
6kVA with Batteries



**5U**  
15,20kVA

The information in this document is subject to change without notice and should not be construed as a commitment by Centiel S.A.

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