

CertaUPS C500 6kVA-10kVA Data Sheet

INPUT	C500-060-B	C500-060-C	C500-100-B	C500-100-C
Acceptable Input Voltage	110VAC-276VAC	110VAC-276VAC	110VAC-276VAC	110VAC-276VAC
Adjustable Bypass Voltage	110VAC-276VAC	110VAC-276VAC	110VAC-276VAC	110VAC-276VAC
Phase	Single phase with ground	Single phase with ground	Single phase with ground	Single phase with ground
Transfer Voltage Range	Based on load percentage 100%/50%	Based on load percentage 100%/50%	Based on load percentage 100%/50%	Based on load percentage 100%/50%
-Line low loss	176VAC/110VAC (±3%)	176VAC/110VAC (±3%)	176VAC/110VAC (±3%)	176VAC/110VAC (±3%)
-Line low comeback	186VAC/120VAC (±3%)	186VAC/120VAC (±3%)	186VAC/120VAC (±3%)	186VAC/120VAC (±3%)
-Line high loss	276VAC (±3%)	276VAC (±3%)	276VAC (±3%)	276VAC (±3%)
-Line high comeback	266VAC (±3%)	266VAC (±3%)	266VAC (±3%)	266VAC (±3%)
THDi	<5% with full load	<5% with full load	<5% with full load	<5% with full load
Input Power Factor	≥0.99(FULL LOAD)	≥0.99(FULL LOAD)	≥0.99(FULL LOAD)	≥0.99(FULL LOAD)
Input Frequency Range	45-55Hz / 54-66Hz	45-55Hz / 54-66Hz	45-55Hz / 54-66Hz	45-55Hz / 54-66Hz
Generator Set	1.5 x UPS Rating Power	1.5 x UPS Rating Power	1.5 x UPS Rating Power	1.5 x UPS Rating Power
OUTPUT				
Power				
-Power(kVA) max	6.0	6.0	10.0	10.0
-Power(kW) max	5.4	5.4	9.0	9.0
-Power Factor	0.9 (Default)	0.9 (Default)	0.9 (Default)	0.9 (Default)
	0.6 - 1 (Flexible)	0.6 - 1 (Flexible)	0.6 - 1 (Flexible)	0.6 - 1 (Flexible)
-Load Power Factor Range	0.5 lagging to 1.0	0.5 lagging to 1.0	0.5 lagging to 1.0	0.5 lagging to 1.0
Output Voltage				
-Waveform	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave
-Nominal voltage	208VAC*/220VAC/230VAC/240VAC	208VAC*/220VAC/230VAC/240VAC	208VAC*/220VAC/230VAC/240VAC	208VAC*/220VAC/230VAC/240VAC
-Voltage regulation	± 1 %	± 1 %	± 1 %	± 1 %
-Transient recovery	100ms (IEC 62040-3 Non-linear load)	100ms (IEC 62040-3 Non-linear load)	100ms (IEC 62040-3 Non-linear load)	100ms (IEC 62040-3 Non-linear load)
-Transient response(0%-100%-0%, R)	± 6 %	± 6 %	± 6 %	± 6 %
-Transient response(20%-100%-20%, R)	± 2 %	± 2 %	± 2 %	± 2 %
-Voltage distortion	< 2% THD, linear load	< 2% THD, linear load	< 2% THD, linear load	< 2% THD, linear load
	< 5% THD, non-linear load	< 5% THD, non-linear load	< 5% THD, non-linear load	< 5% THD, non-linear load
Output Frequency				
-Synchronization range	45-55Hz / 54-66Hz	45-55Hz / 54-66Hz	45-55Hz / 54-66Hz	45-55Hz / 54-66Hz
-Slew rate	1 Hz/s	1 Hz/s	1 Hz/s	1 Hz/s
-Battery mode	(50/60±0.1) Hz	(50/60±0.1) Hz	(50/60±0.1) Hz	(50/60±0.1) Hz
Transfer Time				
-Inverter Mode to Battery Mode.	0ms	0ms	0ms	0ms
-Inverter Mode to Bypass Mode.	0ms	0ms	0ms	0ms
-Inverter Mode to ECO Mode.	0ms	0ms	0ms	0ms
-ECO Mode to Inverter Mode	10ms (typical)	10ms (typical)	10ms (typical)	10ms (typical)
Full Load Efficiency				
-Line mode with battery full charged	>92%	>92%	>92%	>92%
-Battery mode @ 12Vdc/Battery	>92%	>92%	>92%	>92%
-ECO mode	>96%	>96%	>96%	>96%
Overload Capability (Line Mode & Battery mode)	105%~125% : 2 min	105%~125% : 2 min	105%~125% : 2 min	105%~125% : 2 min
	125%~150% : 30 s	125%~150% : 30 s	125%~150% : 30 s	125%~150% : 30 s
	>150% : 1 s	>150% : 1 s	>150% : 1 s	>150% : 1 s
Crest Ratio	3:1	3:1	3:1	3:1
Parallel	UP to 4 for capacity or redundancy	UP to 4 for capacity or redundancy	UP to 4 for capacity or redundancy	UP to 4 for capacity or redundancy
BATTERY				
Rating/Type	12VDC/7Ah	Depend on the capacity of external batteries	12VDC/9Ah	Depend on the capacity of external batteries
Back-up Time (full load)	>7 minutes		>5 minutes	
Quantity	20	20	20	20
DC Voltage	240VDC	240VDC	240VDC	240VDC
Battery-Low Voltage	228VDC	228VDC	228VDC	228VDC
Battery Shutdown Voltage				
- 0 ~ 30% Load	214VDC, 10.7V/pcs	214VDC, 10.7V/pcs	214VDC, 10.7V/pcs	214VDC, 10.7V/pcs
- 30 ~ 70% Load	204VDC, 10.2/pcs		204VDC, 10.2/pcs	
- > 70% Load	190VDC, 9.5V/pcs		190VDC, 9.5V/pcs	
Charger				
- Constant Current Phase	1.2A	4.0A	1.2A	4.0A
- Floating Voltage Phase	273VDC	273VDC	273VDC	273VDC
-Charging current (max)	1.2A	4.0A	1.2A	4.0A
-Charging time	5h charge to 90%	Depend on the capacity of external batteries	5h charge to 90%	Depend on the capacity of external batteries
Leakage current	<300uA	<300uA	<300uA	<300uA
External 12A charger (Optional)	Yes	Yes	Yes	Yes
Temperature Compensation by hardware based on circumstance temperature	-3mV/degree/cell based on 25°C	-3mV/degree/cell based on 25°C	-3mV/degree/cell based on 25°C	-3mV/degree/cell based on 25°C
Features				
ECO Mode	YES	YES	YES	YES
EPO Function	YES	YES	YES	YES
Dual Communication	YES	YES	YES	YES
Auto Derating	YES	YES	YES	YES
Battery Capacity Calculation	YES	YES	YES	YES
Maintenance Bypass Switch	YES	YES	YES	YES
Fan Speed Control	YES	YES	YES	YES
Frequency Converter Mode	YES**	YES**	YES**	YES**
INDICATOR & ALARM				
Display	Smart LCD Display	Smart LCD Display	Smart LCD Display	Smart LCD Display
Battery mode	Beeps every four second	Beeps every four second	Beeps every four second	Beeps every four second
Battery low	Sounding every second	Sounding every second	Sounding every second	Sounding every second
Overload	Sounding twice every second	Sounding twice every second	Sounding twice every second	Sounding twice every second
Fault	Continuous beeping	Continuous beeping	Continuous beeping	Continuous beeping
INTERFACE				
RS232	Optional, supports WinPower Software	Optional, supports WinPower Software	Optional, supports WinPower Software	Optional, supports WinPower Software
USB	Standard, supports WinPower Software	Standard, supports WinPower Software	Standard, supports WinPower Software	Standard, supports WinPower Software
Intelligent Slot	SNMP / RS485 / AS400 / USB Card	SNMP / RS485 / AS400 / USB Card	SNMP / RS485 / AS400 / USB Card	SNMP / RS485 / AS400 / USB Card
Dry Contact	Standard	Standard	Standard	Standard
Remote Panel	Optional	Optional	Optional	Optional
AC Outlets	Terminal	Terminal	Terminal	Terminal
MECHANICAL				
WxHxL (mm)	260 x 708 x 550	260 x 708 x 550	260 x 708 x 550	260 x 708 x 550
Net Weight	86Kg	34Kg	92Kg	37Kg
Operating Temperature Range	0°C ~ 40 °C	0°C ~ 40 °C	0°C ~ 40 °C	0°C ~ 40 °C
Relative Humidity	0 ~ 95% (No condensing)	0 ~ 95% (No condensing)	0 ~ 95% (No condensing)	0 ~ 95% (No condensing)
Audible Noise	<50dB at front 1m	<50dB at front 1m	<55dB at front 1m	<55dB at front 1m
REGULATIONS				
-ESD	IEC 61000-4-2 Level 4	IEC 61000-4-2 Level 4	IEC 61000-4-2 Level 4	IEC 61000-4-2 Level 4
-RS	IEC 61000-4-3 Level 3	IEC 61000-4-3 Level 3	IEC 61000-4-3 Level 3	IEC 61000-4-3 Level 3
-EFT	IEC 61000-4-4 Level 4	IEC 61000-4-4 Level 4	IEC 61000-4-4 Level 4	IEC 61000-4-4 Level 4
-Surge	IEC 61000-4-5 Level 4	IEC 61000-4-5 Level 4	IEC 61000-4-5 Level 4	IEC 61000-4-5 Level 4
-Conduction	IEC 62040-2 Category C3	IEC 62040-2 Category C3	IEC 62040-2 Category C3	IEC 62040-2 Category C3
-Radiation	IEC 62040-2 Category C3	IEC 62040-2 Category C3	IEC 62040-2 Category C3	IEC 62040-2 Category C3
-Safety	IEC 62040-1-1	IEC 62040-1-1	IEC 62040-1-1	IEC 62040-1-1
-Transportation	ETS 300019-2-2 Class 2.3	ETS 300019-2-2 Class 2.3	ETS 300019-2-2 Class 2.3	ETS 300019-2-2 Class 2.3
-Protection	IP20 (static)	IP20 (static)	IP20 (static)	IP20 (static)

*Derate to 90% with 208Vac output voltage.

**Derate to 60% during Frequency Converter Mode automatically.