

# TEOS+ 100

## 1-3kVA

Advanced Battery Management

Auto Sensing Frequency

DSP Control Technology



## GENERAL SPECIFICATIONS

- High frequency on-line double conversion technology
- Active power factor correction (APFC), input power factor up to 0.99
- Output power factor 0.9
- Wide input voltage range (110 V ~ 300 Vac) and frequency range (40 ~ 70 Hz)
- 50/60Hz frequency conversion
- Cold start
- Rear ventilation design and variable speed fan
- Effective software and hardware protection
- Quick and stable charging, 90% capacity restored in 4h (standard model UPS)
- Linear derating in low voltage input reducing battery discharging times
- Settable delayed start when power is restored
- Multiple functions settable via LCD: output voltage, EOD, auto-start, bypass mode, ECO mode and frequency conversion mode
- Multi-platform communications: RS232 (standard), USB / RS485 / SNMP / dry contacts (optional)
- EPO function, and 12 A charger (2/3 kVA only) (optional)

## TECHNICAL SPECIFICATIONS

MODEL	Teos+ 101		Teos+ 102		Teos+ 103		
Capacity	1 kVA/900 W		2 kVA/1800 W		3 kVA/2700 W		
<b>INPUT</b>							
Rated voltage	208 / 220 / 230 / 240 Vac						
Voltage range	110 ~ 176 Vac (linear derating between 50% and 100% load); 176 ~ 280 Vac (no derating); 280 ~ 300 Vac (derating 50%)						
Frequency	40 ~ 70 Hz (auto-sensing)						
Power factor	≥ 0.99						
Bypass voltage range	- 25% ~ +15% (settable)						
Total harmonic distortion (THDi)	≤ 6%						
<b>OUTPUT</b>							
Voltage	208 / 220 / 230 / 240 Vac (settable via LCD)						
Voltage regulation	± 1%						
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz (synchronized range); 50 / 60 Hz ± 0.1 Hz (battery mode)						
Waveform	Sinusoidal						
Power factor	0.9						
Total harmonic distortion (THDv)	≤ 2% (linear load), ≤ 5% (non-linear load)						
Crest factor	3:1						
Overload	105% ~ 125% for 1 min, 125% ~ 150% for 30 s, > 150% for 300 ms						
<b>BATTERIES</b>							
DC voltage	24V (S)		36V (XL)	48V (S)	72V (XL)	72V (S)	96V (XL)
Inbuilt battery	2x7Ah	2x9Ah	/	4x9Ah	/	6x9Ah	/
Charging current (max.)	1A		6A	1A	6A	1A	6A
Recharge time	Standard model: 90% capacity restored in 3 hours; Long time model: depend on the capacity of battery						
<b>SYSTEM</b>							
Efficiency	≥ 90% (Mains mode)		≥ 91% (Mains mode)		≥ 92% (Mains mode)		
	≥ 85% (Battery mode)		≥ 86% (Battery mode)		≥ 87% (Battery mode)		
	≥ 95% (ECO mode)		≥ 96% (ECO mode)		≥ 97% (ECO mode)		
Transfer time	Mains mode to battery mode: 0 ms Inverter mode to bypass mode: 4 ms (typical)						
Protections	Short-circuit, overload, overtemperature, battery discharge protection and fan testing protection						
Communications	RS232 (standard), USB / RS485 / dry contacts / SNMP (optional)						
Display	LCD + LED						
Standards	EN 62040-1, EN 62040-2, EN 61000-3-2, EN 61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11, IEC 61000-2-2, IEC 62040-2, IEC 62040-1, IEC 62040-3						
<b>OTHERS</b>							
Operating temperature	0°C ~ 40°C						
Storage temperature	- 25°C ~ 55°C (without batteries)						
Relative humidity	0 ~ 95% (non-condensing)						
Altitude	≤ 1000 m, derating 1% for each additional 100 m						
IP rating	IP 20						
Noise level at 1m	≤ 50 dB						
Dimensions (HxWxD) (mm)	216x144x312		216x144x336	216x144x417	335x191x418	335x191x419	335x191x418
Packaged dimensions (HxWxD) (mm)	315x230x402		318x232x417	315x230x506	471x318x533	435x277x500	435x277x500
Net weight (kg)	10.4	11	6	16.4	10.5	24.3	11
Gross weight (kg)	10.7	11.3	7	17.8	12	25.9	12.5