

# TEOS+ 200RT

## 10-20kVA

Advanced DSP and 3-Level Technology

High Efficiency

Power Factor 1.0



## GENERAL SPECIFICATIONS

- Advanced DSP and 3-Level technology
- Output power factor 1.0
- Active power factor correction (APFC), input power factor up to 0.99
- High efficiency 95% (up to 98% in ECO mode)
- Advanced digital parallel technology
- 3:1 to 1:1 model settable
- Wide input voltage range (190 - 478 Vac) and frequency range (40 - 70Hz)
- 50 / 60 Hz frequency auto sensing
- Two modes of frequency conversion: 50Hz input / 60Hz output or 60Hz input / 50Hz output
- Dual-input design, supporting independent bypass
- Hot-swappable battery (10kVA)
- Flexible battery configuration (settable 16 - 20 pcs batteries)
- Digitally controlled charger
- High charging current available (Max. 10 A)
- Charging voltage and current configured by demands
- Linear debating in low voltage input reducing battery discharging times, extending the service life of battery
- Intelligent battery management, automatic floating / equalizing charge control, charger dormancy control, increasing battery life by 50%
- Ability to switch on the UPS with batteries
- Settable delayed start time when mains power is restored, reducing the impact on power grid or generator
- Fan speed varies intelligently with temperature, reducing noise and extending its service life
- Equipped with self-aging function
- Compact internal layout, miniaturized the complete unit for small footprint
- LCD+LED display, multi-functional keys operation, friendly human-machine interface
- Powerful background software for parameters configuration
- Advanced multi-platform communications: RS232, USB, RS485, SNMP and dry contacts communication interfaces
- Effective software and hardware protection function, robust and self-diagnostic function, and abundant event log for check

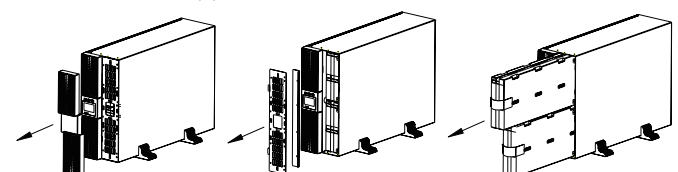
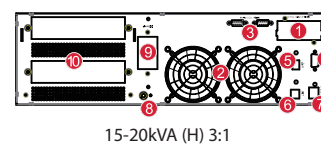
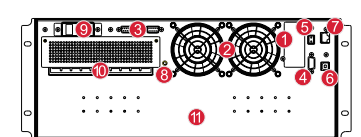
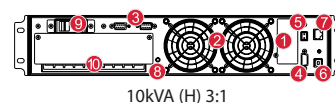


### AVAILABLE OPTIONS

- RS232 and smart card slot included
- Optional parallel function, battery temperature compensation, SNMP card, USB, RS485 card, dry contacts, EMD, and SMS alarms

### REAR PANEL

- |                             |                                     |                        |
|-----------------------------|-------------------------------------|------------------------|
| 1. Intelligent slot         | 5. EPO                              | 8. GND                 |
| 2. Fans                     | 6. USB (optional)                   | 9. Bypass breaker      |
| 3. Parallel port (optional) | 7. Temperature detection (optional) | 10. Terminal and cover |
| 4. RS232                    |                                     | 11. Battery pack       |



Easy for maintenance, hot-swappable battery (10kVA)

## TECHNICAL SPECIFICATIONS

MODEL	Teos+ 210RT	Teos+ 215RT	Teos+ 220RT
Capacity	10 kVA / 10 kW	15 kVA / 15 kW	20 kVA / 20 kW
<b>INPUT</b>			
Input wiring	Three-phase five-wire (3Φ + N + PE)		
Rated voltage	380 / 400 / 415 Vac		
Voltage range	190 - 304 Vac (linear derating between 50% and 100% load); 304 - 478 Vac (no derating)		
Rated frequency	50/60 Hz (auto-sensing)		
Frequency range	40 ~ 70 Hz		
Power factor	≥ 0.99		
Bypass voltage range	- 40% ~ +15% (settable)		
Total harmonic distortion (THDi)	≤ 5%		
<b>OUTPUT</b>			
Output wiring	Single-phase (L-N)		
Rated voltage	208 (PF=0.9) / 220 / 230 / 240 Vac		
Voltage regulation	± 1%		
Frequency	Synchronized to bypass in mains mode; 50/60 Hz + 0.1% Hz in battery mode		
Waveform	Sinusoidal		
Power factor	1.0		
Voltage THD	≤ 1% (linear load); ≤ 3% (non-linear load)		
Crest factor	3:1		
Overload	105% - 110% for 10 min, 110% - 125% for 1 min, 126% - 150% for 30s		
<b>BATTERIES</b>			
DC voltage	192 Vdc (192 - 240 Vdc settable)		
Number of battery	16 pcs (16 - 20 settable)		
Inbuilt battery (standard model)	12 V / 9Ah x 16	/	/
Charging current	Standard model: 1A; Long time model: 5A (default), 1 - 5A settable; 10A (optional)		
Recharge time	Standard model: 90% capacity restored in 8 hours; Long time model: depend on the capacity of battery		
<b>SYSTEM</b>			
Efficiency	≥ 94% at 100% load, max. 95% at 60% load, ≥ 98% in ECO mode		
Transfer time	0 ms		
Protections	Short-circuit, overload, overtemperature, battery low voltage, overvoltage, undervoltage and fan failure		
Max. number of parallel connections	4		
Communications	RS232 (standard), USB / RS485 / dry contacts / SNMP/ battery temperature compensation (optional)		
Display	LCD + LED		
<b>GENERAL</b>			
Operating temperature	0°C ~ 40°C		
Storage temperature	-25°C ~ 55°C (without battery)		
Relative humidity	0 - 95% (non-condensing)		
Altitude	≤ 1000 m, derating 1% for each additional 100 m		
IP rating	IP 20		
Noise level at 1m	≤ 58 dB		
Dimensions (HxWxD) (mm) (*)	88x440x650 (H) 176x440x660 (S)	132x440x780	
Packaged dimensions (HxWxD) (mm) (*)	168x514x696 (H) 418x554x792 (S)	400x554x792	
Net weight (kg) (*)	17 (H), 67 (S)	25.5	
Gross weight (kg) (*)	19 (H), 77 (S)	28	
(*) S means standard model; H means long time model.			