

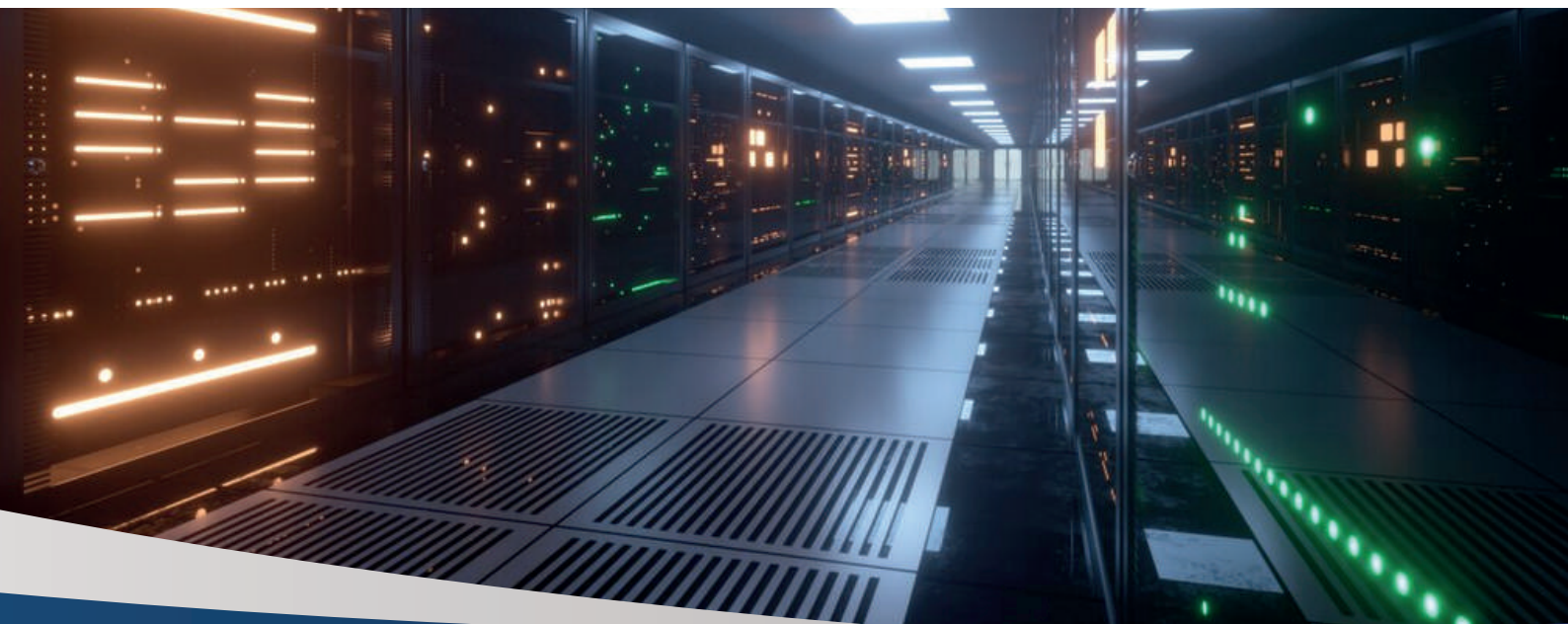


## افرا / Afra

### TEC 9000 Pro

1 KVA ~ 3KVA  
PF 0.9

- High frequency on-line double conversion technology
- DSP (Digital signal processors) control 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)
- Auto sensing frequency
- 50 / 60 Hz 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 USP)
- Linear derating in low voltage input reducing battery discharging times
- Settable delayed start when power is restored
- Hot-swappable battery
- Advanced battery management (ABM)
- 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)
- Optional USB, RS485 card, AS400 dry contacts, SNMP card, SMS alarms, EPO function, MBS (External maintenance bypass switch)



MODEL	TEC9001		TEC9002		TEC9003		مدل
Capacity	1KVA / 900W		2KVA / 1800W		3KVA / 2700W		ظرفیت
<b>INPUT</b>							
Rated voltage	208 / 220 / 230 / 240 Vac						ولتاژ نامی
Voltage range	110 ~ 176 Vac ( linear derating between 50% and 100% load ): 176 ~ 280 Vac (no derating) :280 ~ 300 Vac (derating 50%)						محدوده ولتاژ
Frequency	40 ~ 70 Hz (auto - sensing)						فرکانس
Power factor	≥ 0.99						ضریب قدرت
Bypass voltage range	- 25% ~ + 15% (settable)						محدوده ولتاژ بای پس
Total harmonic distortion	≤ 6%						مجموع اعوجاج هارمونیک
<b>OUTPUT</b>							
Voltage	208 / 220 / 230 / 240 Vac (settable via LCD)						ولتاژ
Voltage regulation	±1%						تنظیم ولتاژ
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz ( synchronized range ) ; 50 / 60 Hz ± 0.1 Hz (battery mode)						فرکانس
Waveform	Sinusoidal						شکل موج
Power factor	0.9						ضریب قدرت
Total harmonic distortion (THD v)	≤ 2% (linear load) ; ≤ 5% (non-linear load)						مجموع اعوجاج هارمونیک (THD v)
Crest factor	3:1						فاکتور قله
Overload	105% ~ 125% for 1 min , 125% ~ 150% for 30s , >150% for 300 ms						اضافه بار
<b>BATTERIES</b>							
DC voltage	36 V (S)	36 V (L)	48 V (S)	48 V (L)	72 V (S)	72 V (L)	ولتاژ DC
Inbuilt battery	3×9 AH	/	4×9 AH	/	6×9 AH	/	باتری داخلی
Charging current (max.)	1 A	6 A	1 A	6 A	1 A	6 A	جریان شارژ (حداکثر)
Recharger time	Standard model: 90% capacity restored in 3 hours ; Long time model: depend on the capacity of battery						زمان شارژ مجدد
<b>SYSTEM</b>							
Efficiency	≥ 90% (Mains mode)		≥ 91% (Mains mode)		≥ 92% (Mains mode)		بهره وری
	≥ 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)						زمان انتقال
Protections	Short-circuit , overload , overtemperature , battery discharge protection and fan testing protection						حفاظت ها
Communications	RS232 (standard), USB / RS485 / dry contacts / SNMP (optional)						ارتباطات
Display	LCD + LED						نمایش
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						استانداردها
<b>OTHERS</b>							
Operating temperature	0°C ~ 40°C						دمای عملیاتی
Storage temperature	-25°C ~ 55°C (without batteries)						دمای ذخیره سازی
Relative humidity	0 ~ 95% (non-condensing)						رطوبت نسبی
Altitude	≤ 1000 m, derating 1% for each additional 100 m						ارتفاع
IP rating	IP 20						رتبه بندی IP
Noise level at 1m	≤ 50 dB						سطح سر و صدا در 1 متر
Dimensions (W×D×H) (mm)	337×145×215	330×145×215	144×417×216	191×418×335	191×419×335	191×418×335	ابعاد (W×D×H) (mm)
Packaged dimensions (W×D×H) (mm)	427×230×325	420×230×325	230×506×315	277×533×471	277×500×435	277×500×435	ابعاد بسته بندی شده (W×D×H) (mm)
Net weight (kg)	10.6	7.6	18.7	9.7	26.8	10.1	وزن خالص (kg)
Gross weight (kg)	11.3	11.1	21.8	13.2	29.7	13.6	وزن ناخالص (kg)

• Derate capacity to 70% in CUCF mode and to 90% when the output voltage is adjusted to 208 Vac.  
• S means standard model , L means long time model.

• All specifications are subject to change without notice.  
• Custom-made specification are acceptable.