



Online double-conversion with full DSP control
IGBT inverter with output isolation transformer
External battery cabinets for extended autonomy



EA890

True Online double-conversion
with full DSP control
& 3 Phase



EA890 & 3 Phase

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Software UPSmart V1.5

- Supports : Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / Windows® 7 / 8 / 10
- Connect with USB .
- Automatic timer.
- Current state of the event.
- Display either the meter, figures, graphs.
- Battery level indicator and a load.
- Show the voltage and frequency of the incoming and outgoing flows.

- Online double-conversion with full DSP control
- IGBT inverter with output isolation transformer
- 100% unbalance load capability
- Output power factor 0.9
- Generator compatible
- Support battery cold start and auto-restart when mains power is restored
- ECO mode operation for energy saving
- Superior protection
- Parallel capacity up to 6 units
- External battery cabinets for extended autonomy
- 7 inches LCD touch screen, friendly human & machine interface
- Front access makes maintenance and replacement simplified (60 ~ 120 kVA)
- Intelligent self-diagnosing function, all kinds of failure protection, large capability of history records storage
- High MTBF (> 200,000 h)
- Low MTTR (< 0.5 h)
- Standard emergency power off (EPO)
- Standard RS232, RS485, dry contacts communication port
- Optional SNMP communication port
- Optional N+X redundancy parallel up to 6 units
- Optional input filter to improve input power factor

Technical specifications

MODEL	EA8920	EA8930	EA8940	EA8960	EA8980	EA89100	EA89120
Capacity	20kVA	30kVA	40kVA	60kVA	80kVA	100kVA	120kVA
Output rated power	18kW	27kW	36kW	54kW	72kW	90kW	108kW
INPUT							
Input wiring	Three-phase five-wire (3 Φ + N + PE)						
Rated voltage	380 / 400 / 415 Vac						
Voltage range	\pm 25%						
Rated frequency	50 / 60 Hz						
Frequency rang	50 / 60 Hz \pm 5%						
power factor	\geq 0.95 (with filter)						
Bypass voltage range	\pm 20% (settable)						
Delayed start of rectifier	1 ~ 300 s (settable via display panel)						
ECO voltage range	\pm 10% (settable)						
OUTPUT							
Output wiring	Three-phase five-wire (3 Φ + N + PE)						
Rated voltage	380 / 400 / 415 Vac						
Output voltage regulation	\pm 1%						
Output frequency regulation	50 / 60 Hz \pm 0.1% in battery mode						
Waveform	Sinusoidal						
Power factor	0.9						
Voltage distortion (THDv)	\leq 1% (linear load), \leq 5% (non-linear load)						
Crest factor	3:1						
Transfer time	AC mode to battery mode: 0 ms Inverter mode to bypass mode: 0 ms Inverter mode to ECO mode: 5 ~ 10 ms						
Overload	105%: long time running, 105% ~ 110% for 1h, 110% ~ 125% for 10 min, 125% ~ 150% for 1 min, 150% ~ 200% for 200 ms, > 200% for 100 ms						
BATTERIES							
DC Voltage	12 V \times configured battery number (settable via display panel)						
Number of batteries	28 ~ 32 pcs (settable)						
Charging current	10 A default / Settable						
Charging	Three-stage charging, auto switch floating / equalizing charge						
Battery self-test	Settable periodic self-test; manually configurable test time and voltage						
SYSTEM							
Efficiency	In line mode: Max. 93%; ECO mode: \geq 98%						
Max. number of parallel connections	6						
Protections	Short-circuit, overload, overvoltage, undervoltage, low battery, overtemperature, fan failure						
Communications	RS232 / RS485 / dry contacts (standard), SNMP (optional)						
OTHERS							
Operating temperature	0 ~ 40C						
Storage temperature	-25C ~ 55 C (without batteries)						
Relative humidity	0 ~ 95% (non-condensing)						
Altitude	\leq 1000 m (derating 1% for each additional 100 m)						
IP rating	IP 20						
Noise level at 1 m	55 dB	55 dB	55 dB	60 dB	65 dB	65 dB	65 dB
STANDARDS							
EMI	EN62040-2						
EMS	IEC61000-4-2(ESD) / IEC61000-4-3(RS) / IEC61000-4-4(EFT) / IEC61000-4-5(surge)						
Manufacturing	ISO 9001:2008, ISO 14001:2004						
TIS	TIS.1291 Type 1-2553, TIS1291 Type 2-2553, TIS.1291 Type 3-2555						
WEIGHT, DIMENSIONS							
Dimensions (WxDxH) (mm)	400 \times 800 \times 1100			600 \times 700 \times 1500	700 \times 800 \times 1700		
Net weight (kg)	175	210	260	460	590	630	690



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