

E21300REU

1:1 6-10kVA

3:1 6-10kVA



FEATURES



RACK MOUNT
UPS



ENGINEER
INSTALLATION



USB
CONNECTIVITY

HIGHLIGHTS

- High frequency, double conversion online technology
- Configurable for either Three Phase or Single Phase Input
- Fully digitised DSP control
- Wide input voltage range
- Cold start and programmable auto re-start functions
- Advanced battery management
- Selectable ECO mode for high efficiency operation
- Lightning and surge protection
- Short circuit and overload protection
- Automatic fan speed control with load variation
- Emergency Power Off facility
- Smart RS232 and USB comms with monitoring software
- Optional relay or SNMP communications card
- Operate up to four units in parallel

The Dale E21300REU UPS range is a high density double conversion Online UPS suitable for powering a wide range of devices such as servers, storage systems, VoIP telephony equipment, network and medical systems as well as industrial applications.

At 3U, the E21300RU range is ideal for 19" rack cabinet installations. It has a practical, modern design and includes several performance advantages over traditional ON LINE UPS.

The newly-designed inverter is one of the best energy conversion systems on the market, with a unity output power factor and 90% operating efficiency in ON LINE Mode.

For business continuity applications requiring long battery runtimes, battery autonomy can be extended up to several hours using up to 4 matching battery expansion packs.

SIMPLIFIED INSTALLATION

- Low noise (<53 dBA): the E200REU can be installed in any environment thanks to its high frequency switching inverter and load-dependent digitally controlled fan;
- Operation guaranteed up to 40 °C (the components are designed for high temperatures and are thus subject to less stress at normal temperatures);

LOW NOISE LEVEL

Thanks to the use of high frequency components and load-based fan speed control, the noise produced by the UPS is less than 53 dB.

FLEXIBLE CONFIGURATION

The UPS is highly flexible and easy to configure, Offering either Single Phase or Three Phase input options whilst providing a Single Phase output.

Matching battery packs for this unit enable you to expand the autonomy whilst maintaining the high quality look of the UPS suite.

HIGH BATTERY RELIABILITY

- Automatic and manual battery test;
- Extendible runtime using matching battery cabinets. (maximum 4 cabinets)

HIGH QUALITY OUTPUT VOLTAGE

- Even with non-linear loads (IT loads with a crest factor of up to 3:1);
- High short circuit current on bypass;
- Filtered, stabilised and reliable voltage (ON LINE double conversion technology (VFI compliant with EN62040-3) with filters for the suppression of atmospheric disturbances;
- Power factor correction: UPS input power factor close to 1 and sinusoidal current uptake.

SOFTWARE

UPS MONITORING SUITE

COMMUNICATION ACCESSORIES

E-SNMP/2 - SNMP card for network monitoring of UPS

E-RELAY/2 - Volt-free card for status monitoring of UPS

INSTALLATION ACCESSORIES

UNIVERSAL RAIL KIT - For Rack Mount Applications

EMBS63/11/2 - Rack Mount EMBS for Single Phase Input UPS

EMBS63/31/2 - Rack Mount EMBS for Three Phase Input UPS



MODEL	E21306REU	E21310REU
OVERVIEW		
Active power (kVA)	6kVA	10kVA
Active power (kW)	6kW	10kW
Topology	True Online Rack UPS	
INPUT		
Number of phases	1P + N + E or 3P + N + E	
Nominal voltage	220 / 230 / 240 Vac or 380 / 400 / 415 Vac	
Voltage Range	208 - 276 Vac or 360 - 478 Vac	
Frequency Range	40Hz - 70Hz (Auto-Detect)	
Power Factor	>0.99	
OUTPUT		
Number of Phases	1P + N + E	
Power factor	1.0pf with 20 Batteries, 0.9 with 18 Batteries, .8 with 16 Batteries	
Nominal voltage (V)	208 / 220 / 230 / 240Vac ± 2%	
Frequency Range	50 - 60 Hz ± 0.2Hz	
THD (Linear Load)	<2%	
THD (Non-Linear Load)	<5%	
Efficiency	up to 90%	
Overload Capacity	105-110% for 60 Minutes, 111-125% for 10 Minutes, 125-150% for 1 Minute >150% Switch to bypass	
Crest Factor	3:1	
Short Circuit Protection	Yes	
Waveform	Pure Sinewave	
Transfer Time	0mS	
BATTERIES		
Battery Model	Variable	
DC Voltage	192 / 216 / 240 VDC	
Battery Quantity	16 / 18 / 20	
Backup Time @ Half Load	Variable	
Backup Time @ Full Load	Variable	
Charge Current	12A	14A
Recharge time	Depends on External Capacity	
EXTERNAL BATTERY PACKS		
Battery Pack Model	EER2000U	
Maximum Number of External Packs	5 Packs	
ENVIRONMENT		
Temperature	0 °C - +40 °C	
Relative Humidity	0-95%	
Altitude	<1500m	
Storage Temperature	-25 °C - +55 °C	
Noise Level	<53dB	
Heat Loss	0.38kW	0.64kW

MODEL	E21306REU	E21310REU
PARALLEL OPTIONS		
Parallel Capability	Yes	
Max. Number Parallel UPS	4	
COMMUNICATIONS		
Standard	Standard RS485 / USB / Parallel Port	
SNMP Card	E-SNMP/2 (Optional)	
Alarm Card	E-RELAY/2 (Optional)	
WEIGHTS & DIMENSIONS		
Weight (kg)	27kg	26kg
Dimensions (H x W x D)	131 x 443 x 580mm	
Rack Space Required	3U	
STANDARD ACCESSORIES		
Manuals	User Manual	
Software	Only with SNMP Card	
Data Cables	RS232 & USB	
OTHER		
Standard Warranty Period	3 Years for Electronics / 1 Year for Batteries	
Recommended EMBS	EMBS63/11/2 or EMBS63/31/2	

EER2000U Series Battery Pack 6 / 10kVA

MODEL	EER2000U
Compatible UPS Model	E206REU / E21306REU / E2010REU / E21310REU
BATTERY	
Battery Type	12V Valve Regulated Lead Acid (VRLA) maintenance free
Battery Life	10 Year design life at 20°C
Battery Capacity	7Ah
Maximum number of packs	6
Number of battery strings per pack	1
Nominal voltage	240V
Battery Charger	
Protection	Circuit breaker
DC charge voltage	272.4V
DC charge current	Supplied by UPS
recharge time	Dependent on qty of battery packs
Environment	
Operating temperature	0 °C - +40 °C
Relative humidity	0-90% (non-condensing)
Altitude	1500m maximum
Storage temperature	0 °C - +40 °C
WEIGHTS & DIMENSIONS	
Weight (kG)	68kg
Dimensions (H x W x D)	131 (3U) x 443 x 720mm

Pack(QTY) UPS	Autonomy Full Load (Minutes)						Autonomy Half Load (Minutes)					
	1	2	3	4	5	6	1	2	3	4	5	6
E206REU / E21306REU	9	20	33	47	61	76	20	47	76	106	138	171
E2010REU / 21310REU	5	11	18	26	33	41	11	25	41	58	75	94

EERS2000U Series Battery Pack 6 / 10kVA

MODEL	EERS2000U
Compatible UPS Model	E206REU / E21306REU / E2010REU / E21310REU
BATTERY	
Battery Type	12V Valve Regulated Lead Acid (VRLA) maintenance free
Battery Life	10 Year design life at 20°C
Battery Capacity	7Ah
Maximum number of packs	6
Number of battery strings per pack	1
Nominal voltage	240V
Battery Charger	
Protection	Circuit breaker
DC charge voltage	272.4V
DC charge current	Supplied by UPS
recharge time	Dependent on qty of battery packs
Environment	
Operating temperature	0 °C - +40 °C
Relative humidity	0-90% (non-condensing)
Altitude	1500m maximum
Storage temperature	0 °C - +40 °C
WEIGHTS & DIMENSIONS	
Weight (kG)	68kg
Dimensions (H x W x D)	177 (4U) x 443 x 490mm

Pack(QTY) UPS	Autonomy Full Load (Minutes)						Autonomy Half Load (Minutes)					
	1	2	3	4	5	6	1	2	3	4	5	6
E206REU / E21306REU	6	12	18	24	30		16	32	48	64	80	
E2010REU / 21310REU	2	4	6	8	10		7	14	21	28	35	



DALE

POWER SOLUTIONS

Looking for something more bespoke?

With our own purpose-built, manufacturing facility, we're a one-stop shop for our customers providing design consultancy, manufacture and ongoing maintenance for our products.

What we do

- An end-to-end service - design, manufacture, install, commissioning and servicing
- Experts in customised UPS solutions
- In-house mechanical and electrical design capability
- Solutions for any environment, application and location
- Industry-specific solutions including WIMES specified and PADS Approved UPS
- In-house project management team to manage the development and delivery of your product for exactly when you need it.

Get in touch with our team today to discuss your requirements.

hello@dalepowersolutions.com

0330 999 3000

dalepowersolutions.com

Your power in safe hands