

E203RSU

1:1 3kVA



FEATURES



RACK / TOWER
CONVERTIBLE



PLUG & PLAY
INSTALLATION



HOT SWAPPABLE
BATTERY



USB
CONNECTIVITY



CONFIGURABLE
OUTLETS

HIGHLIGHTS

- Short depth unit - only 430mm deep
- High frequency, double conversion online technology
- 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
- Automatic battery charge in UPS off mode

The Dale E203RSU UPS range is the the new range of high density double conversion On line 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 only 2U, the E203RSU 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 92% 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

- E203RSU can be installed as a tower or in 19" rack cabinets, by simply pulling out and rotating the display panel;
- Low noise (<50 dBA): the E200RU 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 50 dB.

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.

FLEXIBLE CONFIGURATION

The UPS is highly flexible and easy to configure. Programmable functions can be set via software or manually via the front display panel. E203RSU can be configured in the following operating modes:

- On Line: maximum load protection and output voltage waveform quality;
- ECO Mode: to increase efficiency (up to 98%); allows you to select LINE INTERACTIVE technology;
- The output sockets can be programmed to disconnect less critical loads during blackouts (Configurable outlet function).

HIGH BATTERY RELIABILITY

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

INSTALLATION VERSATILITY

E203RSU can be used in a tower or rack format, by simply turning the display and adding the supplied handles or optional runners.



SOFTWARE

UPS MONITORING SUITE

COMMUNICATION ACCESSORIES

E-SNMP/1-MINI - SNMP card for network monitoring of UPS

E-RELAY/1-MINI - Volt-free card for status monitoring of UPS

INSTALLATION ACCESSORIES

UNIVERSAL RAIL KIT - For Rack Mount Applications

EMBS16/11/AR - Rack Mount EMBS for 3kVA UPS

EMBS16/11/PP - Wall Mount EMBS for 3kVA UPS

MODEL	E203RSU
OVERVIEW	
Active power (kVA)	3kVA
Active power (kW)	3kW
Topology	True Online Rack / Tower UPS
INPUT	
Number of phases	1P + N + E
Connection Type	IEC-C20 x 1
Nominal voltage	208 / 220 / 230 / 240 Vac
Voltage Range	160 - 300 Vac
Frequency Range	50Hz - 60Hz (Auto-Detect)
Power Factor	>0.99
OUTPUT	
Number of Phases	1P + N + E
Connection Type	IEC-C13 x 8; IEC-C19 x 1
Power factor	1.0pf
Nominal voltage (V)	208 / 220 / 230 / 240Vac ± 1%
Frequency Range	50 - 60 Hz ± 0.02Hz
THD (Linear Load)	<2%
THD (Non-Linear Load)	<4%
Efficiency	up to 92%
Overload Capacity	105-110% for 10 Minutes, 111-130% for 1 Minute, >130% for 3 Seconds
Crest Factor	3:1
Short Circuit Protection	Yes
Waveform	Pure Sinewave
Transfer Time	0mS
BATTERIES	
Battery Type	10 Year VRLA
DC Voltage	72VDC
Battery Quantity	No Internal Battery
Charge Current	4A
EXTERNAL BATTERY PACKS	
Battery Pack Model	EER203U
Maximum Number of External Packs	4 Packs
ENVIRONMENT	
Temperature	0 °C - +40 °C
Relative Humidity	0-90%
Altitude	<1500m
Storage Temperature	-25 °C - +55 °C
Noise Level	<50dB
Heat Loss	0.26kW

MODEL	E203RSU
DISPLAY	
LCD Measurements	Voltage / Frequency / Battery level / Backup Time / Output Load Watts & VA / Temperature
LED Indicators	Alarm / Bypass Mode / Battery Mode / Inverter Mode
Alarm (Audible / Visual)	Audible or Visual; Line Failure / Battery Low / Overload / System Fault
COMMUNICATIONS	
Standard	Standard RS232 / USB
SNMP Card	E-SNMP/1-MINI (Optional)
Alarm Card	E-RELAY/1-MINI (Optional)
WEIGHTS & DIMENSIONS	
Weight (kG)	26.2kg
Dimensions (H x W x D)	86.5 x 440 x 430mm
Rack Space Required	2U
STANDARD ACCESSORIES	
Manuals	User Manual
Software	Only with SNMP Card
Input Cables	3 Pin UK Plug
Output Cables	IEC-C13 x 3
Data Cables	RS232 & USB
OTHER	
Standard Warranty Period	3 Years for Electronics / 1 Year for Batteries
Recommended EMBS	EMBS16/11/AR or EMBS16/11/PP

EER200U Series Battery Pack 1-3kVA

MODEL	EER201U	EER203U
Compatible UPS Model	E201RU	E203RU
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	4	
Number of battery strings per pack	2	
Nominal voltage	36V	72V
Battery Charger		
AC Supply limits	208-256V	
Protection	Circuit breaker	
DC charge voltage	41.25V	82.5V
DC charge current	2A	
recharge time	8 hours to 90% capacity	
charger output protection	Fuse	
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)	30kg	44.6kg
Dimensions (H x W x D)	86.5 x 440 x 430mm	86.5 x 440 x 710mm

Pack(QTY)	Autonomy Full Load (Minutes)				Autonomy Half Load (Minutes)			
	1	2	3	4	1	2	3	4
UPS								
E201RU	28	51	76	102	63	115	171	230
E203RU	18	33	50	67	41	75	112	151

EERS203U Series Battery Pack 3kVA

MODEL	EERS203U
Compatible UPS Model	E203RU / E203RSU
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	4
Number of battery strings per pack	1
Nominal voltage	72V
Battery Charger	
Protection	Circuit breaker
DC charge voltage	82.5V
DC charge current	2A supplied by own mains feed
recharge time	8 hours to 90% capacity
charger output protection	Fuse
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)	30kg
Dimensions (H x W x D)	86.5 (2U) x 440 x 460mm

Pack(QTY)	Autonomy Full Load (Minutes)				Autonomy Half Load (Minutes)			
	1	2	3	4	1	2	3	4
UPS								
E203RU	11	18	26	33	25	41	58	75
E203RSU	5	11	18	26	11	25	41	58

EERS203U-4U Series Battery Pack 3kVA

MODEL	EERS203U-4U
Compatible UPS Model	E203RU / E203RSU
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	3
Number of battery strings per pack	3
Nominal voltage	72V
Battery Charger	
Protection	Circuit breaker
DC charge voltage	82.5V
DC charge current	Supplied by UPS
recharge time	8 hours to 90% capacity
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)	Autonomy Full Load (Minutes)			Autonomy Half Load (Minutes)		
	1	2	3	1	2	3
UPS						
E203RU	26	49	75	58	118	171
E203RSU	18	41	67	41	94	151



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