

EMEX 110

110 Volt AC/DC central power supply systems

EMEX 110 units provide 110V AC/DC to provide power to 110V CPS luminaires or converted CPS 230V luminaires.

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01 EMEX 110 volt
AC/DC central power
supply cabinet size

System design

Systems provide 110V AC continuously under mains healthy conditions, and battery back-up at 110V DC upon mains failure. EMEX 110 units benefit from the same modular construction as the EMEX Power static inverter range. Charger modules utilise solid state electronics of the highest reliability. Units feature MCB protection throughout, to provide a rugged easy to maintain system with exceptional performance for emergency lighting use. Each charger has input and output protection, and measures and limits its own current, making it a self contained unit.

Alarms and status indicators are provided on the front panel display, which provides clear and concise information, rather than a long list of parameters, which may be confusing. EMEX Power is designed and manufactured in the UK.

Standard features: EMEX 110 system overview

EMEX Power offers a host of standard features and benefits, as listed below. Note that some items will be optional, extra cost items on other systems, or may not be available at all if the system is not designed specifically and solely for emergency lighting use.

Performance

- 110V AC/DC output
- Excellent recharge capability – 80% after 12 hours following rated discharge
- MCB protection throughout; no fuses
- EMEX Power true modular construction with common spares (charger, control PCB, and system interface common across the full system range)
- Individual MCB protection for each module - AC and DC circuits
- Individual cooling fans for each charger with on-demand operation (not continuously running)
- Split parallel charger above 10 amps – enhanced integrity with the ability to operate with one or more charger modules isolated (subject to increased recharge time)
- Integral maintenance bypass facility (ability to support output load in bypass mode whilst maintenance is performed)
- Temperature compensated charger
- Standard maintained transformer and switchable for non-maintained

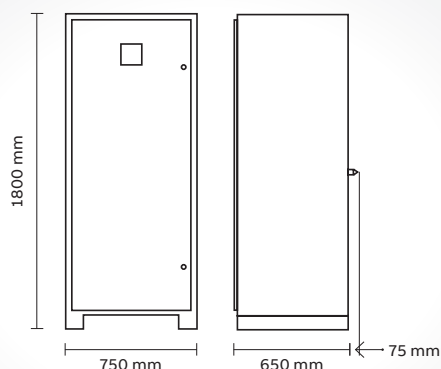
Alarms and instrumentation

- Comprehensive display
- Charger alarm pack
- Momentary “push to test” button
- Fire alarm interface
- Final exit interlock
- Internal and external MCB monitoring
- Local/remote maintained circuit control
- Sub-circuit monitor connection
- Two sets of volt-free alarm relay contacts
- System-inhibit engineers’ switch
- Remote alarm unit option
- Remote test

Mechanical

- IP21 & IP31 rated cabinet as standard
- Easy front panel access
- Inter-cabinet trunking for battery cables
- Fork-lift plinth
- Lifting eyes for crane lift as standard
- Installation pack with all tools required
- Detailed instruction manual

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- 01 Invertor module
- 02 Remote alarm unit

Batteries

Standard systems are supplied with Valve Regulated Lead Acid (VRLA) batteries, also known as ‘Sealed Lead Acid’. These batteries are sealed for their design life of 10 years.

Lead Acid Planté and Nickel Cadmium batteries are available upon request, however, these batteries require a much larger physical area, and emit potentially explosive gases, meaning the battery room must be adequately ventilated in line with EN 50272 Special attention to EN 50272 should be observed.

These reasons, along with the additional capital cost, generally outweigh the additional life obtained, as demonstrated below.

Cabinet size

Standard cabinet size is 750 mm wide x 650 mm deep x 1800 mm tall. For larger installations, cabinets are mounted side by side to provide sufficient accommodation for the batteries.

Overall depth of 725 mm is required to allow a ventilation gap of 75 mm (rubber back-stop provided ensures this distance is maintained). Cabinets may be mounted side-by-side since no side ventilation is required.

Remote alarm

British Standard BS 5266 Part 8 (BS EN 50172) section 7.2.2 requires that a visual daily check of the central power supply alarms is made. It is also a requirement that the CPS should be located in a secure area, which is typically a locked switch room in the basement.

We offer an optional remote alarm unit (RAU), which assists the user to identify any alarm conditions.

Remote alarm unit providing both audible and visual fault indication with mute facility. The RAU requires a local 220 – 240V AC supply and should be linked to the static central power supply unit by a two core cable.

- 01



- Remote alarm unit

Part no.	Order code
RAU/240V	ELD0075.003A

- 02



EMEX 110 AC/DC

Order codes

EMEX 110 system installed codes:

Part Code Key:

ELD A B C D . E F G H

- A System Type 6 For EMEX 110
 B (C) Duration: 1 for 1hr, 15 for 1.5 hr, 2 for 2 hr and 3 for 3hr
 C (D) Phase - 1 for single and 3 for 3 phase Input only
 EFG KW (multiplied by 0.1)
 H additional suffix below, e.g. X

Example:

ELD6110.020 = EMEX 110, 1 hr, 1 Phase @ 2 kW
 ELD6310.020 = EMEX 110, 3 hr, 1 Phase @ 2 kW

Note: X & B suffix code will be used to allow the phasing of battery deliveries and will not show on product documentation or product. The X & B codes will only be used for order processing and logistics and will show on and will show on the Shipping and invoice document.

Suffix Description:

- X Excluding batteries
 B Battery Kit
 N Nicad cells

Note: Suffix TS is not applicable to the EMEX 110 central battery system and is not compatible with EMEX Test Automatic testing system.

Example:

ELD6110.020N
 ELD6110.020X
 ELD6110.020B

The new EMEX order codes have the Machine and Batteries split into two codes, to allow the control to customers during project execution. So to explain the process with this as an example the new codes will be quoted as: Full System Code ELD6110.030 as declared in the following tables this code is the installed machine including the batteries, this is a descriptive code for certification compliance and product identification, etc. ELD6110.020 = Total Price of installed system.

Actual order codes for processing with GID codes are as below:

- ELD6110.020X – Machine
- ELD6110.020B – Battery

EMEX 110 - Single phase 110 AC/DC 220-240 V 50/60 Hz

Commercial rating	Power rating (EN50171)				
	Watts	1 hour duration	1.5 hour duration	2 hour duration	3 hour duration
2000	1600	ELD6110.020	-	-	ELD6310.020
3000	2400	ELD6110.030	-	-	ELD6310.030
4000	3200	ELD6110.040	-	-	ELD6310.040
5500	4400	ELD6110.055	-	-	ELD6310.055
7500	6000	ELD6110.070	-	-	ELD6310.070
8000	6400	ELD6110.080	-	-	ELD6310.080
11000	8800	ELD6110.110	-	-	ELD6310.110
15000	12000	ELD6110.150	-	-	ELD6310.150

All EMEX systems Are subject to price on application so to obtain a quotation and the correct part order codes or to order an EMEX Power sytem or for special product requirements please contact your local ABB Emergilite sales office / representative.

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03 Lifting eyes for crane lift

