

AE400-Core Technical Specification

The AE400-Core is a LV battery and mains interconnect system which couples plug-in modules to the battery, and as required to the AC feed point. The unit contains both RCD and Earth Fault monitoring plus a high-capacity AC IN AC Out bridge relay facilitating safe and controlled operation with external AC feeds. The design minimises the number of internal looms and connectors to enhance long term reliability.

The AE-400 Core unit provides the control platform that serves as the control and data backbone for both current and future plug-in modules, whether integrated within the unit itself or connected through additional linked units.

Preliminary Technical Specifications Rev 03:

Battery Nominal Voltage	435 VDC
Operating Voltage Range	370 - 460 VDC (128 cells @ 2.9 - 3.6 VDC)
Maximum DC Current	60 A
AC Nominal Voltage	230 VAC
Operating Range	180 – 275 VAC at Battery Nominal Voltage
Frequency	50 Hz
Operating Range	45 – 55 Hz
Rated Power	24kW – 6 x Modules fitted
Maximum AC In to AC Out Current	200 A AC Link
Dimensions	2U Rack case – 491 x 582 x 87 mm (W x L x H)
Weight	10.0 kg – no plug in modules fitted
Ambient Temperature	-10°C to 45°C – Derated above 45°C
Cooling	Forced Air
Humidity	Max 90% non-condensing
Power Connections	AC In, AC Out, Battery, 6 x Pulselink Edge slots
Interfaces	USB Type A, Ethernet, Battery CAN, Pulselink
Indicators	Core Active/Online, Module Active/Online
Safety	In-built RCD, Earth Fault Monitoring



Internal view with 5 Modules fitted - "B-level" pictured