

power your future



Charging station for electric vehicles with energy storage **EV-CME150 (60kW/142kWh)**



The EV-CME charging station integrated with energy storage is a state-of-the-art infrastructure solution that enables efficient charging of electric vehicles, especially in areas with limited AC grid connection capacity.

The station's housing is made of powder-coated stainless steel and has an IP54 protection rating and IK10 mechanical resistance, making it weatherproof. Authorisation of the charging process takes place via an RFID reader or optionally via an external application. In addition, the station can be equipped with a 55" display for remote and independent management of advertising content.

The EV-CME offers direct current (DC) charging of electric vehicles with up to 150 kW via two Type 2 CCS connectors. The unit is supplied with three-phase 400 V at 50 Hz in TN, with a connection power of 65 kVA. The substation supports the OCPP 1.6 communication protocol and is equipped with a GSM modem as standard. Operation is via a touchscreen display or optionally via the charging service provider's application.

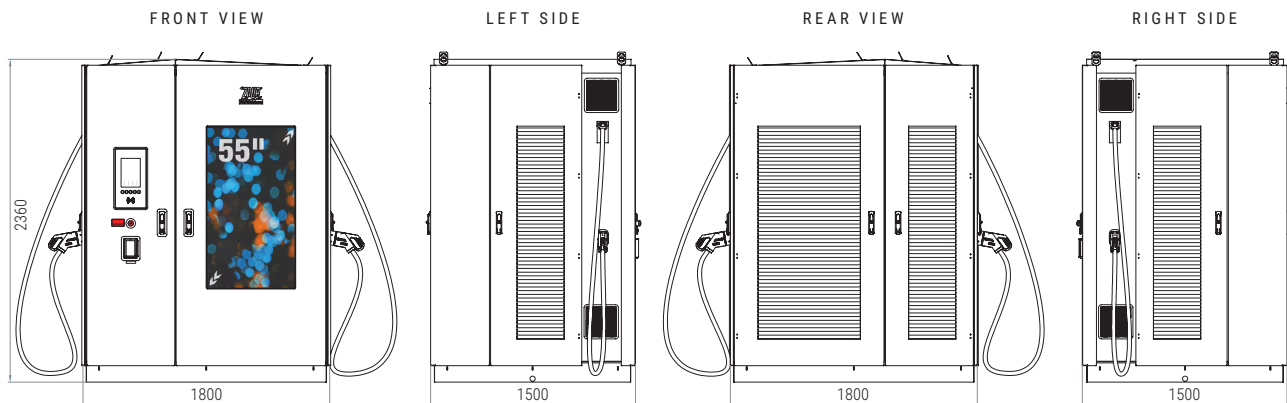
A key component of the station is an energy storage system based on 142 kWh lithium-ion batteries. The energy storage accumulates energy during periods of low demand or when energy is cheaper, and then uses it to rapidly charge vehicles during peak demand.

EV-CME can also balance the grid, accumulating excess energy and giving it back during periods of deficit, which contributes to grid stabilisation and will enable the use of dynamic tariffs.

This solution is particularly suitable for cities where the need to install charging stations is high, but poor power supply infrastructure prevents the installation of traditional DC stations. With this technology, it is possible to place charging stations in strategic locations without the need for significant redevelopment of existing infrastructure.

It is possible to manufacture an EV-CME with higher parameters. The chart shows an example solution only.

Charging station facades



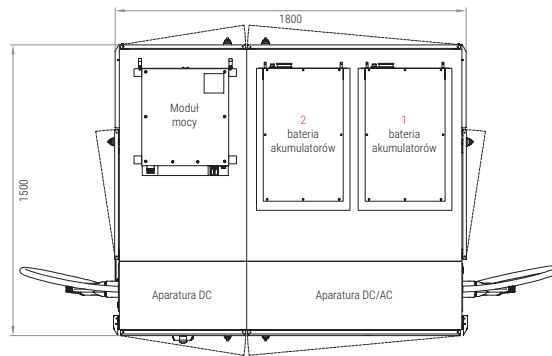
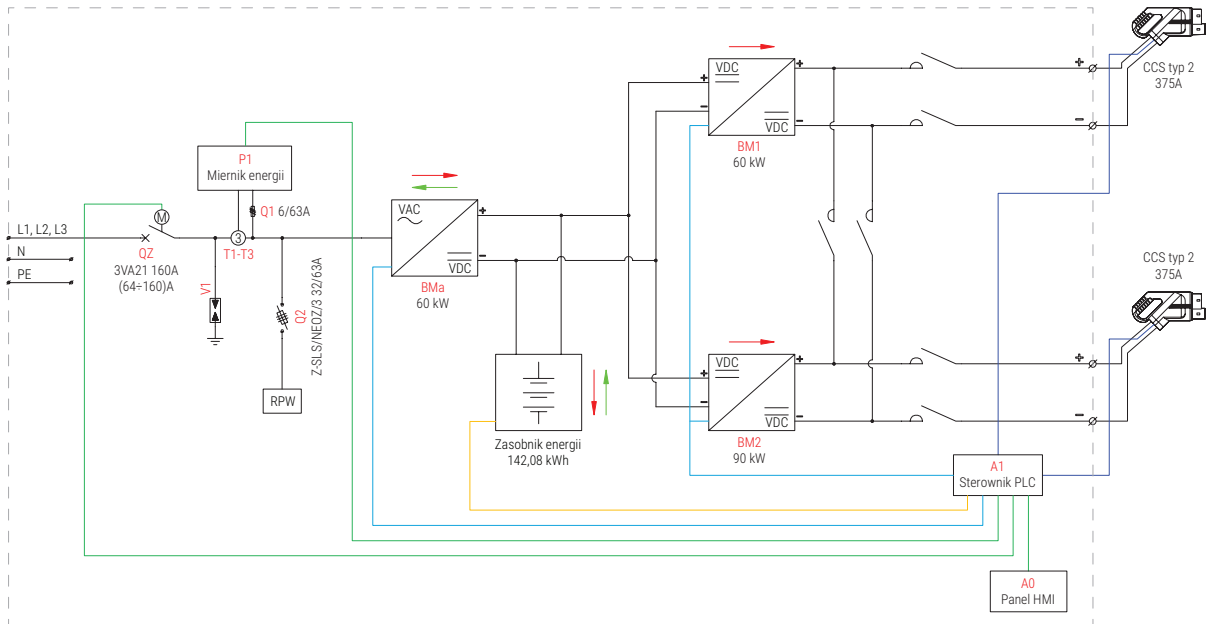
Technical specifications

		EV-CME150 (60kW/142kWh)				
AC POWER SUPPLY	Voltage U _{AC}	3 x 400 V / 50 Hz				
	Protection	3VA21 160A (64÷160)A				
	Connection power	65 kVA				
	Network layout	TN-S, TN-C-S, TN-C				
ENERGY STORAGE PARAMETERS	Maximum charging / discharging power to the grid	60 kW				
	Installed capacity	142.08 kWh				
	DC voltage range	650–800 VDC				
CHARGING STATION PARAMETERS	Charging with current DC	Rated power	150 kW			
		Output voltage U _{DC}	30 ÷ 1000 VDC			
		Number of connectors / type	2 / CCS typ 2			
		Maximum current at the charging connector	375A (up to 500A in Boost Mode)			
		Power distribution between connectors	Connector 1	150 kW	–	60 kW
			Connector 2	–	150 kW	90 kW
	Charging cable length	4,2 m ±5% ¹⁾				
	Charging system	Mode 4				
	Communication protocol	OCPP 1.6				
	Charging authorisation	RFID card / charging service provider application ²⁾				
10" display	10-inch – standard					
GENERAL CHARACTERISTICS	55" display	55" display, remote and independent management of advertising content – optional				
	Degree of protection	IP54 / IK10				
	External dimensions	1800mm x 1500mm x 2360mm				
	Weight	~ 2800 kg				
	Working temperature range	up -30°C to +50°C				
	Standards and norms	CE, LVD 2014/35/UE, EMC 2014/30/UE, PN EN IEC 61851 1, PN-EN 61851 23, PN EN 61851 24, PN EN 62196-1, PN EN 62196 3:2015-02, DIN SPEC 70121				

¹⁾ standard charging cable length 4.2m ±5%, other on request after consultation with the manufacturer

²⁾ optional

Electrical diagram, arrangement of equipment



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NOTE: Due to technological progress, the manufacturer reserves the right to make technical changes without notice. Please contact the manufacturer for updates.

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For more information, contact:

Tomasz Sandecki, Project Manager
+49 173 728 8376 | @ tomasz.sandecki@zpue.pl

Małgorzata Rak, Sales Engineer
+48 41 38 81 731 | +48 506 005 478 | @ malgorzata.rak2@zpue.pl

Always up-to-date materials on:

www.zpue.com

ZPUE S.A., Jędrzejowska 79 c, 29-100 Włoszczowa
tel. +48 41 38 81 000, e-mail: office@zpue.pl