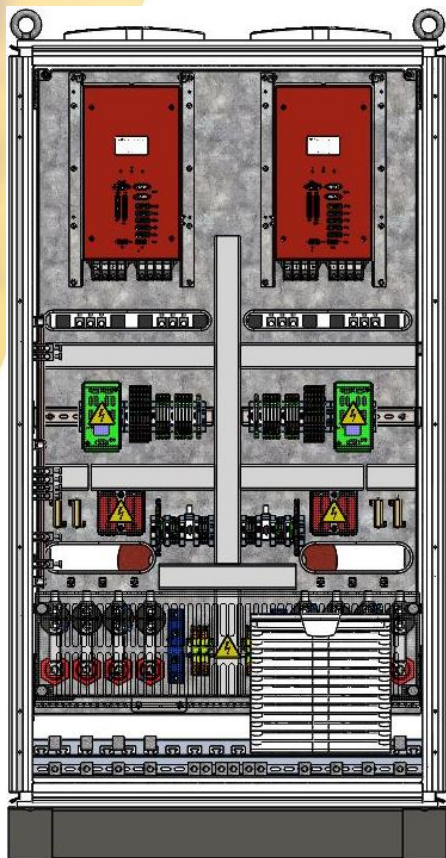




# AEP 200 Cabinet

## Dual Bidirectional converter



- Innovative in energy storage & Power Electronics
- Custom-made solutions
- Complete solution: storage & Power Electronics
- Design and system integration

## Features

- Dual converter (DC/DC or AC/DC versions possible)
- Complete cabinet including:
  - Chokes
  - Pre-charge
  - Switches
  - Fuses
  - Voltage measurement
- Easy installation
- Various control and operation modes

## Applications

- DC-link battery chargers
- Combined ESS with batteries and ultracapacitors
- Battery charger
- DC-grid
- Photovoltaic
- Battery system

## Mechanical Data

Width x Depth x Height  
800 x 500 x 1400 mm  
Approx. 215 kg

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## Electrical Characteristics

(e.g. 1 converter, AEP100 DC/DC)

Symbol	Parameter	Description	Value	Unit
<b>General</b>				
$P_R$	Rated power	@ $U_{out}$ 600V, 160A, 5 kHz	100	kW
$P_{MAX}$	Max. power	@ $U_{out}$ 600V, 180A, 5 kHz only for 10 minutes	125	kW
$F_r$	Switching frequency		$\leq 16$	kHz
	Efficiency		$> 95$	%
<b>Auxiliary voltage</b>				
	Control power supply	Supplied by the customer	24	VDC
	-	-	200	W
<b>Field Bus and Input Control Signals</b>				
	Field bus	CAN	-	-
	Switch ON	Input, activate DC-link switches and output switches	24	V
	Enable	Input, activate DC/DC converter	24	V
	E-stop	Input, emergency stop	24	V
<b>Input</b>				
$U_{in}$	Input voltage range	DC-link voltage	$\leq 800$	VDC
$I_{max}$	Max. current	Per connector	100	A
<b>Output</b>				
$U_{out}$	Output voltage range		0 - 750	VDC
$I_{nom}$	Nominal current	@ $U_{out}$ 600V, 5 kHz	160	A
$I_{max}$	Max. output current	@ $U_{out}$ 600V, 5 kHz only for 10 minutes	180	A
$I_{max\_phase}$	Max. phase current	@ $U_{out}$ 600V, 180A, 5 kHz only for 10 minutes	60	A

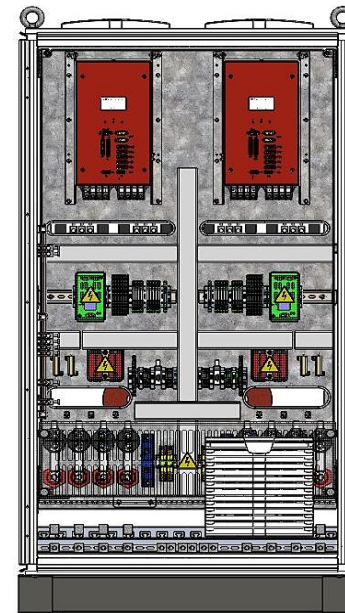


## Examples of Cabinet configurations

With 1 Converter

General	
Rated Power (max)	
Switching frequency (max)	
Input	
Input voltage range	
Output	
Output voltage range	

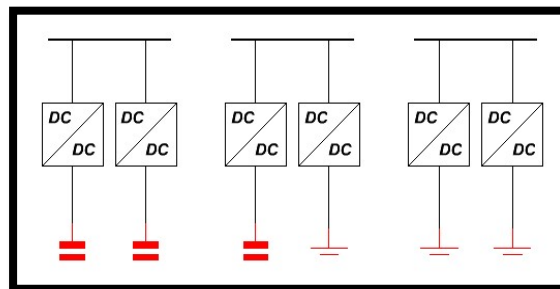
DC/DC
1x100 kW
≤16 kHz
≤800 V <sub>DC</sub>
0 – 750 V <sub>DC</sub>



With 2 Converters

DC/DC
2 x 100 kW
≤16 kHz
≤800 V <sub>DC</sub>
0 – 750 V <sub>DC</sub>

The cabinet and the converter setup is very flexible. This means, that the DC/DC converters can be connected to an Ucap ESS, Battery ESS or a combination of both. (See examples below).





## Mechanical data

Parameter	Description	Value	Unit
Width		800	mm
Height		1400	mm
Depth		500	mm
Weight	Equipped with one converter	215	kg

## Dimensions

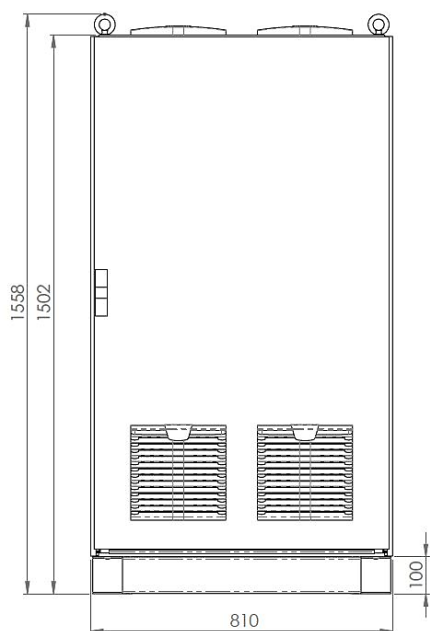


Figure 1: Front view

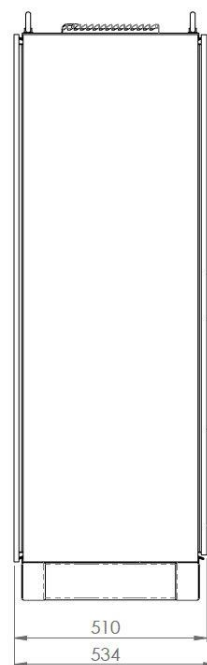


Figure 2: Side view

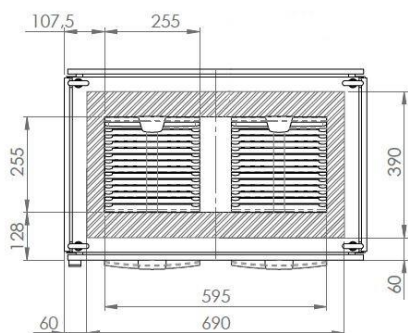


Figure 3: Top view

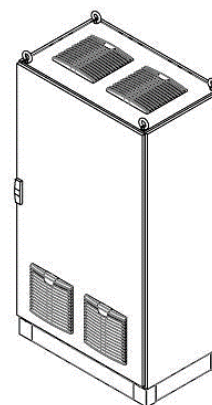


Figure 4: Perspective view