



Völse & Rath - Architekten ©

# Böwe Cardtec Paderborn(D)

## Building Details

### CONTACTS

	Name	Website (or e-mail)
<b>Owner</b>	Bauherrn Gemeinschaft Hilke Meier + Peters	<a href="http://www.ak-branderburg.de">www.ak-branderburg.de</a>
<b>Architect</b>	Völse & Rath - Architekten	<a href="http://www.voelse-rath.com">www.voelse-rath.com</a>
<b>Energy Consultant</b>	BIOHAUS PV Handels GmbH	<a href="http://www.biohaus.de">www.biohaus.de</a>
<b>PV Installer</b>	BIOHAUS PV Handels GmbH	<a href="http://www.biohaus.de">www.biohaus.de</a>

### BUILDING

<b>Completion year</b>	2003 Building	2003 PV Plant		
<b>Category</b>	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Renovation	<input type="checkbox"/> Enlargement	<input type="checkbox"/> Other
<b>Typology</b>	<input type="checkbox"/> Residential	<input type="checkbox"/> Administration	<input checked="" type="checkbox"/> Industrial	<input type="checkbox"/> Sport
	<input type="checkbox"/> Agricultural	<input type="checkbox"/> Urban	<input type="checkbox"/> Historical	<input type="checkbox"/> Other

### Description

The building is the home of a company producing printing machines for smartcards. It is a representative office building as well as a factory building. The building has a timber frame structure and the envelope is externally completely glazed. The southwards facade is conceived as an energetic wall in which PV-Laminates are used as a cladding material for a ventilated facade system. The uniform dark blue monocrystalline solar cells are used on a black background. The total solar active facade area is 80 sqm. The building is well heat insulated complying the German Low Energy Standard "Niedrigenergiehaus"



## BiPV Details

### LOCATION OF PLANT

<b>Roof</b>	Flat roof	Sloped	Curved
<b>Façade</b>	Cladding	Balcony	Greenhouse Curved
<b>Glass</b>	Façade	Roof	Solar shading Canopy
<b>Orientation</b>	South	West	East North

### ARCHITECTURAL EVALUATION

<b>Color</b>	dark blue (black background)
<b>Transparency</b>	opaque
<b>Frame</b>	framed
<b>Acknowledgments</b>	BDA award 1999 architecture in Schleswig-Holstein, 1 <sup>st</sup> prize (German Architect's Association)

### SPECIFICATION

<b>Photovoltaic</b>	Monocrystalline	Multicrystalline	Thin Film
<b>PV Module</b>	<b>Cells</b>	N/A	
	<b>Module</b>	ISOFOTON I-106, ISOFOTON I-53	
<b>Power</b>	<b>kWp</b>	9.65	
<b>Size</b>	<b>m<sup>2</sup></b>	80	
<b>Energy production</b>	<b>kWh/year</b>	N/A	