



# Ground-mounted PV Systems

## *RECA RS*



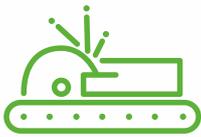


 POLISH MANUFACTURER

**RECA RS**

RECA SOLAR is a Polish manufacturer of ground mounted solar systems. Experience and knowledge gained in western markets allows us to offer products and services at the highest level. Over the last years we have completed projects on grounds and roofs with a total capacity of over 150 MW. Our advantage is an ambitious approach to each project.

A modern machinery park and the knowledge and experience of our specialists allow us to provide a wide range of services.



**MODERN  
MACHINERY PARK**



**LOGISTICS**



Magnelis®



## Durability and reliability

All of our mounting systems are coated with the innovative Magnelis® coating, which is up to 10 times more corrosion-resistant than typical galvanized steel.



## Savings and economy

Optimised project ensures low cost and consumption of construction material and high reliability for many years, which results in a lower price and higher return on investment over the years.



## Experience

Over 8 years of experience in foreign markets has allowed us to accumulate a vast amount of knowledge, experience and trust of customers and investors. We take an ambitious approach to each project.



## Individual approach

Every project is different, so we assist our customers in choosing the right installation systems and help in solving technical issues.



## STRUCTURAL SYSTEMS

The RECA RS installations are always designed according to the needs of the project in terms of panel size, inclination angle, ground conditions, snow and wind loads.



### Stability testing

#### RF-STEEL EC3 PR1

Ultimate limit state: Design of the cross-section, Stability calculations, Design of the weld, Checking the stresses, Plastic Design, Serviceability limit state: Deformations, Web width



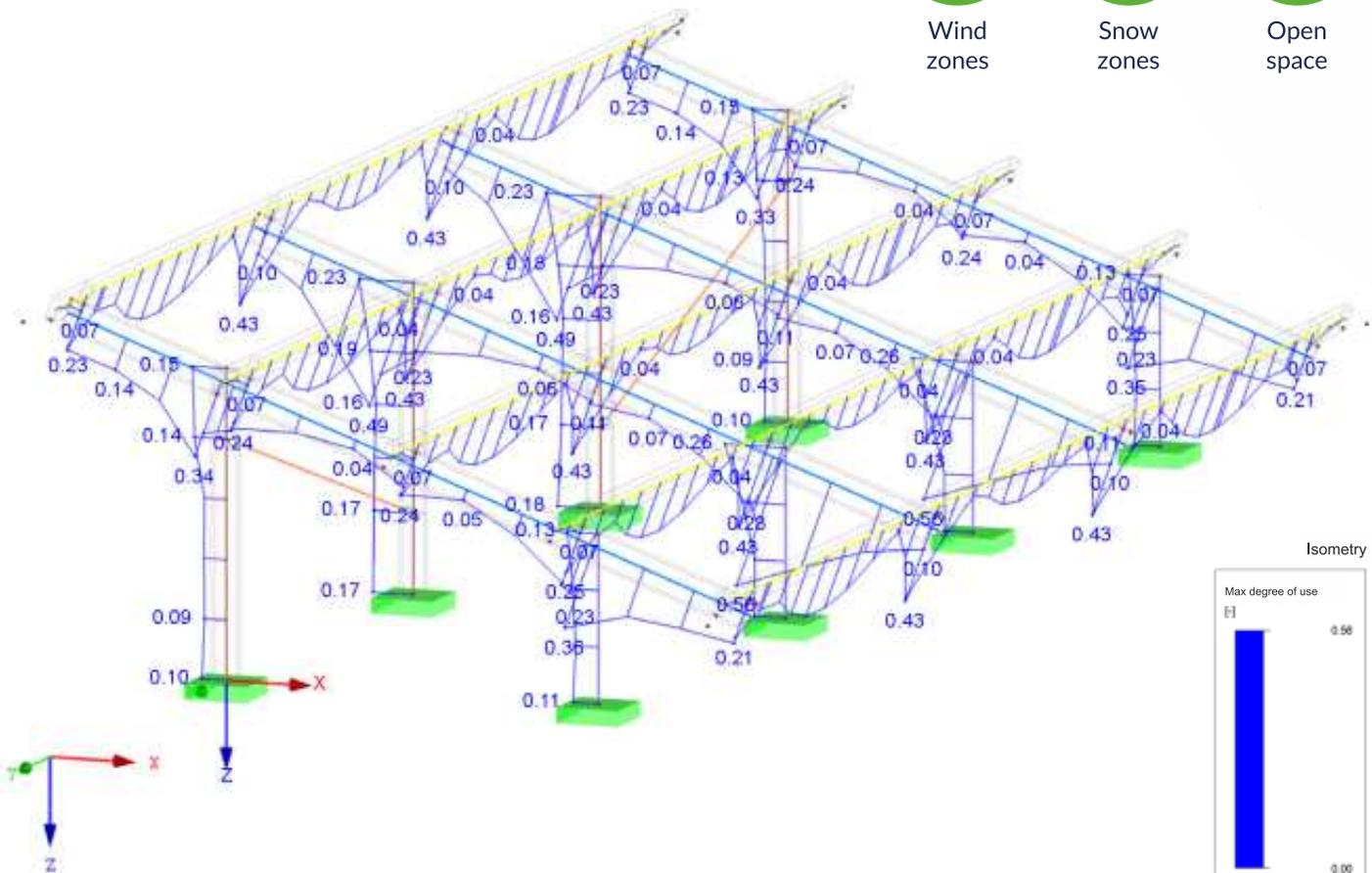
Wind zones



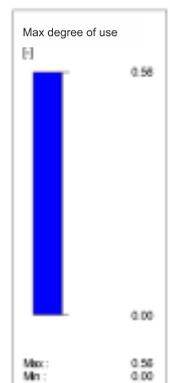
Snow zones



Open space



Isometry



# RECA RS



Our RECA RS construction systems are designed for quick and easy installation as well as high resistance to external factors. The Magnelis coating of steel gives installations increased resistance to corrosion.



**Quick and easy installation**

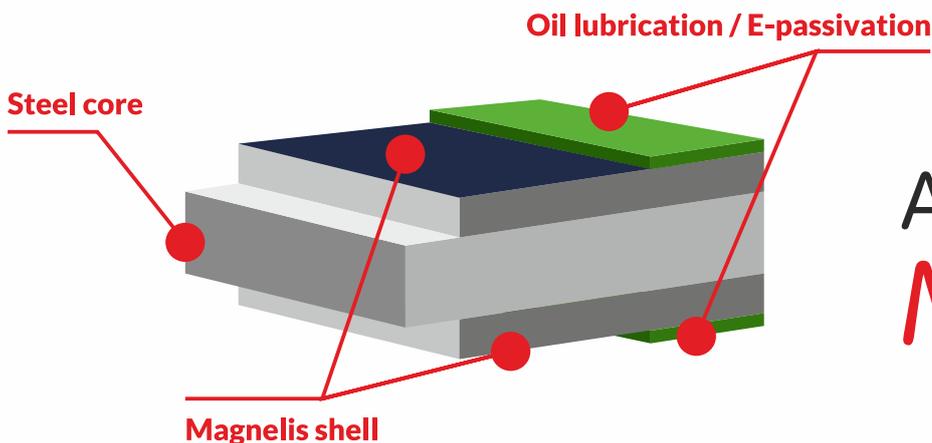
## INSTALLATION METHODS



**Driven into the ground**



**Attached to concrete**



ArcelorMittal  
**Magnelis®**



Solutions for MONO-FACIAL modules



Solutions for BI-FACIAL modules



Solutions for micro-installations



Solutions for micro-installations



E-PORT parking structures



AGRA parking structures

# 1 SYSTEMS FOR MODULES *RECA RS* SINGLE-SIDED MONOFACIAL



## Ground structure system *RECA RS-1*

**Type of system:** Single-supported

**Installation method:** Driven into the ground

**Module type:** Single-sided with a frame

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 15-35°

**Module arrangement:** 2 modules vertically



Single-supported



Driven into the ground



Module with frame



Vertical installation



Varied inclination angles of panels



Guarantee

## Ground structure system *RECA RS-3*

**Type of system:** Single-supported

**Installation method:** Driven into the ground

**Module type:** Single-sided with a frame

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 15-35°

**Module arrangement:** 3 modules horizontally



Single-supported



Driven into the ground



Module with frame



Horizontal installation



Varied inclination angles of panels



Guarantee

# 1 SYSTEMS FOR MODULES *RECA RS* SINGLE-SIDED MONOFACIAL



## Ground structure system *RECA RS-2*

**Type of system:** Two-supported

**Installation method:** Driven into the ground

**Module type:** Single-sided with a frame

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 15-35°

**Module arrangement:** 4 modules horizontally



Two-supported



Driven into the ground



Module with frame



Horizontal installation



Varied inclination angles of panels



Guarantee

## Ground structure system *RECA RS-4*

**Type of system:** Two-supported

**Installation method:** Driven into the ground

**Module type:** Single-sided with a frame

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 15-35°

**Module arrangement:** 4 modules horizontally



Two-supported



Driven into the ground



Module with frame



Horizontal installation



Varied inclination angles of panels



Guarantee

# 1 SYSTEMS FOR MODULES *RECA RS* SINGLE-SIDED MONOFACIAL



## Ground structure system *RECA RS-5*

**Type of system:** Two-supported

**Installation method:** Driven into the ground

**Module type:** Single-sided with a frame

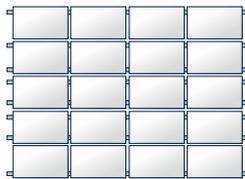
**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 15-35°

**Module arrangement:** 5 modules horizontally



Two-supported



Driven into the ground



Module with frame



Horizontal installation



Varied inclination angles of panels



Guarantee

## Ground structure system *RECA RS-6*

**Type of system:** Two-supported

**Installation method:** Driven into the ground

**Module type:** Single-sided with a frame

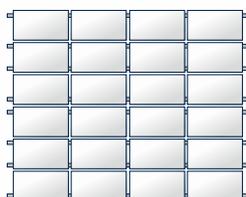
**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 15-35°

**Module arrangement:** 6 modules horizontally



Two-supported



Driven into the ground



Module with frame



Horizontal installation



Varied inclination angles of panels



Guarantee

# 1 SYSTEMS FOR MODULES *RECA RS* SINGLE-SIDED MONOFACIAL



## Ground structure system *RECA RS-7*

**Type of system:** Two-supported

**Installation method:** Driven into the ground

**Module type:** Single-sided with a frame

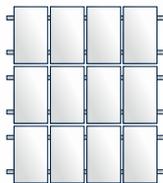
**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 15-35°

**Module arrangement:** 3 modules vertically



Two-supported



Driven into the ground



Module with frame



Vertical installation



Varied inclination angles of panels



Guarantee

## Ground structure system *RECA RS-18*

**Type of system:** Two-supported

**Installation method:** Driven into the ground

**Module type:** Single-sided with a frame

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 15-35°

**Module arrangement:** 2 modules vertically



Two-supported



Driven into the ground



Module with frame



Vertical installation



Varied inclination angles of panels



Guarantee

# 1 SYSTEMS FOR MODULES *RECA RS* SINGLE-SIDED MONOFACIAL



## Ground structure system *RECA RS-10*

**Type of system:** Two-supported

**Installation method:** Attached to concrete

**Module type:** Single-sided with a frame

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 15-35°

**Module arrangement:** 4 modules horizontally



Two-supported



Attached to concrete



Module with frame



Horizontal installation



Varied inclination angles of panels



Guarantee

## Ground structure system *RECA RS-11*

**Type of system:** Two-supported

**Installation method:** Dug in and poured with concrete

**Module type:** Single-sided with a frame

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 15-35°

**Module arrangement:** 2 modules vertically



Two-supported



Driven into the ground



Attached to concrete



Module with frame



Vertical installation



Varied inclination angles of panels



Guarantee

# 2 SYSTEMS FOR MODULES *RECA RS* DOUBLE-SIDED BIFACIAL



## Ground structure system *RECA RS-12*

**Type of system:** Two-supported

**Installation method:** Driven into the ground

**Module type:** Double-sided BIFACIAL

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 15-35°

**Module arrangement:** 4 modules horizontally



BIFACIAL  
modules



Two-supported



Driven into  
the ground



Horizontal  
installation



Varied inclination  
angles of panels



15  
years  
of warranty  
Guarantee

## Ground structure system *RECA RS-15*

**Type of system:** Two-supported

**Installation method:** Driven into the ground

**Module type:** Double-sided BIFACIAL

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 15-35°

**Module arrangement:** 3 modules horizontally



BIFACIAL  
modules



Two-supported



Driven into  
the ground



Horizontal  
installation



Varied inclination  
angles of panels



15  
years  
of warranty  
Guarantee

# 2 SYSTEMS FOR MODULES *RECA RS* DOUBLE-SIDED BIFACIAL



## Ground structure system *RECA RS-14*

**Type of system:** Two-supported

**Installation method:** Driven into the ground

**Module type:** Double-sided BIFACIAL

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 15-35°

**Module arrangement:** 2 modules vertically



BIFACIAL  
modules



Two-supported



Driven into  
the ground



Vertical  
installation



Varied inclination  
angles of panels



15  
years  
of warranty  
Guarantee

## Ground structure system *RECA RS-16*

**Type of system:** Single-supported

**Installation method:** Driven into the ground

**Module type:** Double-sided BIFACIAL

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 15-35°

**Module arrangement:** 2 modules vertically



BIFACIAL  
modules



Two-supported



Driven into  
the ground



Vertical  
installation



Varied inclination  
angles of panels



15  
years  
of warranty  
Guarantee

## Ground structure system RECA RS-8

**Type of system:** Three-supported

**Installation method:** Driven into the ground

**Module type:** Single-sided with a frame

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 10-15°

**Module arrangement:** 4 modules horizontally



Three-supported



Driven into the ground



Module with frame



Horizontal installation



Varied inclination angles of panels



Guarantee

## Ground structure system RECA RS-25

**Type of system:** Multi-support

**Installation method:** Driven into the ground

**Module type:** Double-sided BIFACIAL

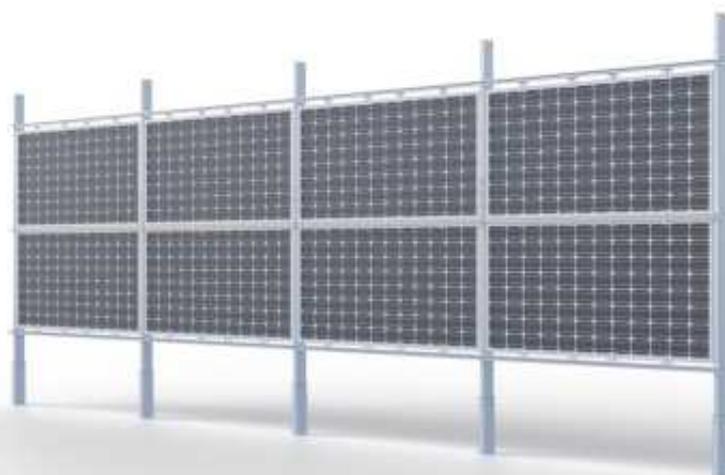
**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Commercial

**Inclination angles:** 90°

**Module arrangement:** 2 modules horizontally



Multi-support



Driven into the ground



BIFACIAL modules



Horizontal installation



Varied inclination angles of panels



Guarantee

# 4 SYSTEMS FOR MODULES *RECA RS* FOR MICRO-INSTALLATION



## Ground structure system *RECA RS-1/M UNIVERSAL*

**Type of system:** Single-supported

**Installation method:** Driven into the ground

**Module type:** Single-sided with a frame

**Material:** S390 structural steel

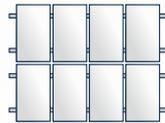
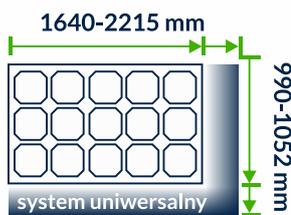
**Anti-corrosion coating:** Magnelis®

**Intended use:** Micro-installations

**Slots configuration:** 8 modules / 4 modules / 2 modules

**Inclination angles:** 25-30°

**Module arrangement:** 2 modules vertically



Single-supported



Driven into the ground



Module with frame



Vertical installation



Varied inclination angles of panels



Guarantee



## Ground structure system *RECA RS-18/M UNIVERSAL*

**Type of system:** Two-supported

**Installation method:** Driven into the ground

**Module type:** Single-sided with a frame

**Material:** S390 structural steel

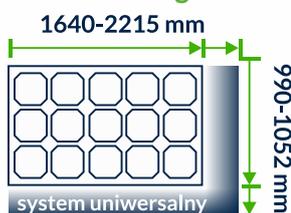
**Anti-corrosion coating:** Magnelis®

**Intended use:** Micro-installations

**Slots configuration:** 8 modules / 4 modules / 2 modules

**Inclination angles:** 25-30°

**Module arrangement:** 2 modules vertically



Two-supported



Driven into the ground



Module with frame



Vertical installation



Varied inclination angles of panels



Guarantee



# 4 SYSTEMS FOR MODULES *RECA RS* FOR MICRO-INSTALLATION



## Ground structure system *RECA RS-2/M UNIVERSAL*

**Type of system:** Two-supported

**Installation method:** Driven into the ground

**Module type:** Single-sided with a frame

**Material:** S390 structural steel

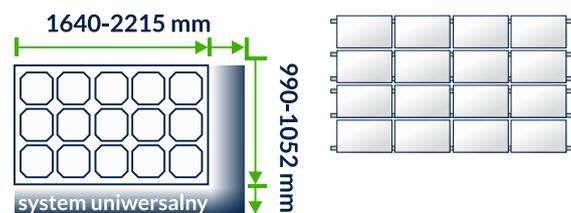
**Anti-corrosion coating:** Magnelis®

**Intended use:** Micro-installations

**Slots configuration:** 16 modules / 8 modules / 4 modules / 2 modules

**Inclination angles:** 25-30°

**Module arrangement:** 4 modules horizontally



Two-supported



Driven into the ground



Module with frame



Horizontal installation



Varied inclination angles of panels



Guarantee



## Ground structure system *RECA RS-17 BIFACIAL*

**Type of system:** Two-supported

**Installation method:** Driven into the ground

**Module type:** Double-sided BIFACIAL

**Material:** S390 structural steel

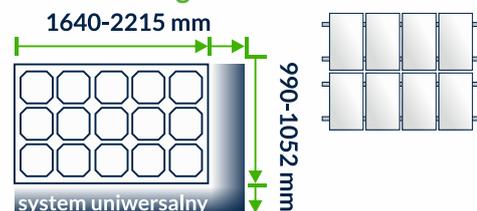
**Anti-corrosion coating:** Magnelis®

**Intended use:** Micro-installations

**Slots configuration:** 8 modules / 4 modules / 2 modules

**Inclination angles:** 25-30°

**Module arrangement:** 2 modules vertically



Two-supported



Driven into the ground



BIFACIAL modules



Vertical installation



Varied inclination angles of panels



Guarantee



# 5 SYSTEMS RECA RSC E-PORT PARKING MODULES



## Parking shelter RECA RSC-1

**Type of system:** Two-supported

**Installation method:** Attached to concrete

**Module type:** Single-sided and two-sided

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Carport

**Inclination angles:** 10°

**Module arrangement:** 4 modules horizontally

**Number of stations:** 2 / possibility of combining multiple stations

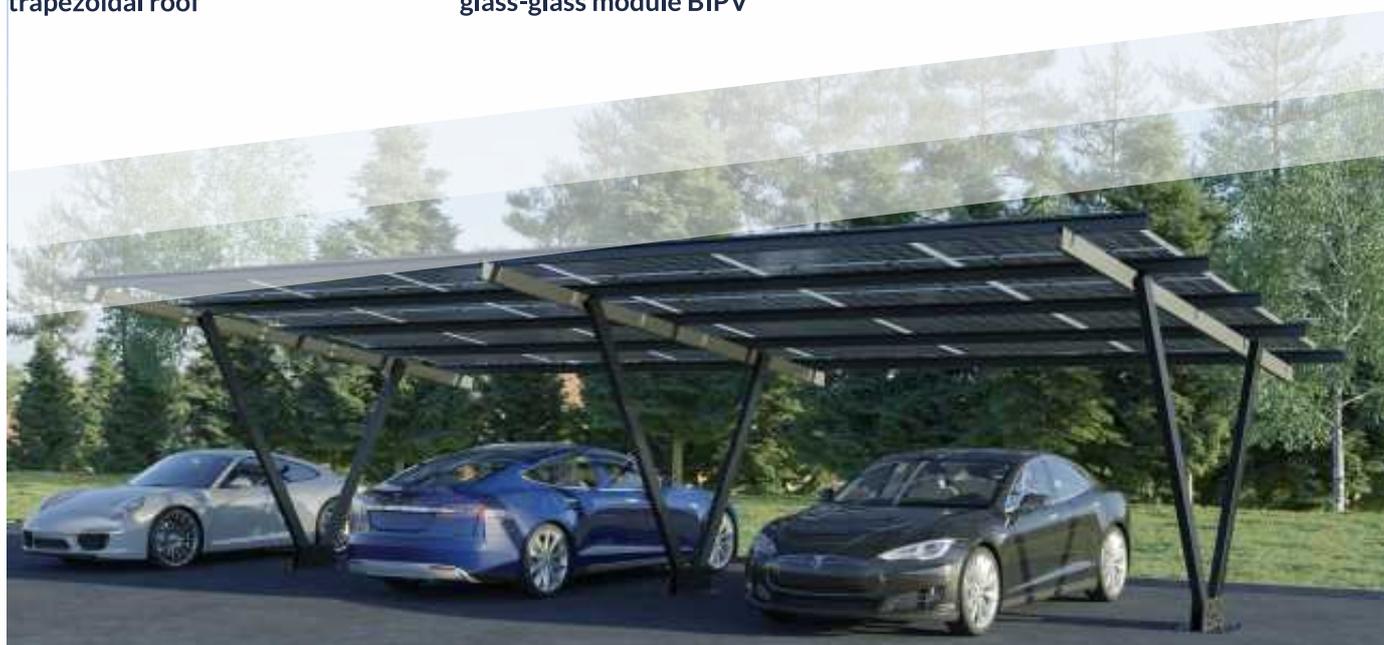
**Roofing option:** trapezoidal sheet, BIPV modules



trapezoidal roof



glass-glass module BIPV



# 5 SYSTEMS *RECA RSC* E-PORT PARKING MODULES



## Parking shelter *RECA RSC-2*

**Type of system:** Three-supported

**Installation method:** Attached to concrete

**Module type:** Single-sided and two-sided

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

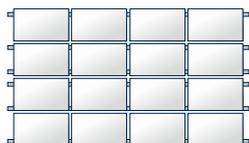
**Intended use:** Carport

**Inclination angles:** 10°

**Module arrangement:** 4 modules horizontally

**Number of stations:** 1 / possibility of combining multiple stations

**Roofing option:** trapezoidal sheet, BIPV modules



trapezoidal roof



glass-glass module BIPV



# 5 SYSTEMS *RECA RSC* E-PORT PARKING MODULES



## Parking shelter *RECA RSC-3*

**Type of system:** Two-supported

**Installation method:** Attached to concrete

**Module type:** Single-sided and two-sided

**Material:** S390 structural steel

**Anti-corrosion coating:** Magnelis®

**Intended use:** Carport

**Inclination angles:** 10°

**Module arrangement:** 4 modules horizontally

**Number of stations:** 1 / 2 stations

**Roofing option:** trapezoidal sheet, BIPV modules



trapezoidal roof



glass-glass module BIPV



# REALIZATIONS



Jakubowo 1 MW

System **RECA RS-2**



Sochaczew 1,9 MW

System **RECA RS-3**



Sokołów Małopolski 2 MW

System **RECA RS-12 BIFACIAL**



Dussin 8 MW DE

System RECA RS-1

# PROJECTS



 1,5 MW Rosslau DE



 600kW Beckingen DE



 1,5 MW Freisen DE



 1,2 MW Demmin DE



 750 kW Delitsch DE



 750 kW Doggingen DE



 1 MW Reitscheid DE



 750 kW Bilzingsleben DE



1,66 MW Rymanów PL



1 MW Lubycza Królewska PL



1,8 MW Sochaczew PL



1 MW Marianka PL



1 MW Przypisówka PL



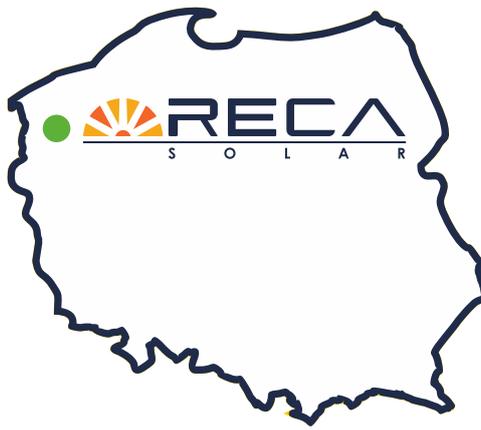
1 MW Roztocze PL



2 MW Żołyń PL



2 MW Dębica PL



272

COMPLETED PROJECTS

150<sub>MW</sub>

TOTAL POWER

5500<sub>TONS</sub>

STEEL DELIVERED

152

SATISFIED CUSTOMERS



[www.reca-rs.com](http://www.reca-rs.com)

Contact:

+48 91 350 94 38  
[office@reca-rs.com](mailto:office@reca-rs.com)

 RECA Group Sp z o.o.  
ul. Mur Południowy 1,  
73-200 Choszczno, Poland  
tel. +48 91 350 94 38  
Fax +48 91 350 94 39  
[office@reca-rs.com](mailto:office@reca-rs.com)

 Ust PL781-188-11-04  
Steuernummer (DE) 056 / 657 / 70909  
REGON: 302244777  
KRS 0000436894  
Gericht Szczecin, XII Wydział Gospodarczy

 Bank: PEKAO SA  
IBAN: PL 48 1240 3637 1978 0010 4863 7742  
SWIFT: PKOPLPW