

# dhpTechnology

makes flexible

# IMPACT

with EcoStruxure™ Automation Expert

Open, software-defined automation empowers the development of innovative folding solar roof technology with unmatched flexibility, scalability, agility, and speed.



dhp Technology with Baffy AG – Switzerland

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Life Is On

**Schneider**  
Electric





### A ray of innovation

dhp Technology, a Swiss company, offers a groundbreaking solution: the HORIZON folding solar roof. Its patented retractable mechanism enables renewable energy generation in areas already serving other purposes, such as car parks, logistics sites, and sewage treatment plants.

“A contemporary and sustainable energy production over already used industrial and traffic areas – that is what dhp Technology is committed to,” explained Gian Andri Diem, the company’s co-founder and managing partner. “We are helping to build the energy and mobility revolution and, together with our partners, are shaping a CO<sub>2</sub>-free energy supply,” he added.

The HORIZON roof is the first product of this kind. Compared to conventional fixed photovoltaic systems, it’s more ecological and cost-effective thanks to its lightweight construction. Additionally, the modular build means it can be easily extended as energy needs grow.

This innovation has earned dhp Technology support from the Swiss government and the European Commission, along with prestigious awards including the Watt d’Or, the Swiss Solar Prize, and the Swiss Future Prize 2021.



## Goal

Accelerate and scale production to meet surging demand for the company’s breakthrough folding solar roofs.

## Challenge

- Simplify control system customization
- Eliminate reliance on third-party services
- Speed up development and commissioning

## Solutions

- EcoStruxure Automation Expert
- Modicon M262 dPAC
- Harmony P6 iPC

## Results

- 2x faster system configuration and commissioning
- Simplified system repeatability



## Scaling up for success

Following a successful pilot and enthusiastic reviews, orders began to flow in. Initially, dhp Technology used a traditional control and visualization system for roof automation. However, adapting it for each customer required outsourcing, leading to delays and added costs.

To scale effectively, dhp Technology needed a completely different automation system approach. The company began searching for a

modular, flexible, and vendor-agnostic solution that would simplify customization, accelerate commissioning, and reduce delivery times.

At a specialist forum for wastewater management, dhp Technology's representatives met Schneider Electric experts, and both teams quickly realized that Schneider's innovative automation offering answered the needs of the folding solar roof manufacturer.

# 50%

faster configuration  
and commissioning



## New opportunities unfold

That answer was EcoStruxure Automation Expert, an open, software-defined automation solution. By decoupling software from hardware, it allows control applications to run across devices from different manufacturers, providing unmatched flexibility and freedom.

To ensure a smooth transition to the new system, Schneider Electric brought in Baffy AG, a trusted system integrator partner specializing in automation, electrical engineering, mechanics, pneumatics, and hydraulics. Baffy AG stepped up to develop expertise in EcoStruxure Automation Expert and transfer that knowledge to the folding solar roof manufacturer.

Today, dhp Technology's technicians can independently commission and maintain solar roof automation systems. Alongside EcoStruxure Automation Expert, they use a setup of a central controller with an industrial PC and field boxes for managing individual solar panels. New control system setups are created using pre-configured software modules, eliminating the need for on-site programming.

This modular, flexible approach has also enabled dhp Technology to enrich its solution with an integrated intelligent weather station. It's programmed to automatically retract the solar roof when extreme weather conditions, such as hail or snowfall, are predicted.

A bright business future

“With EcoStruxure Automation Expert, we use an automation solution that offers us a unique combination of manufacturer independence and reduced complexity,” said Gian Andri Diem.

The ability to configure rather than custom-program control software is a game-changer for the company. Independent from third-party services, dhp Technology can tackle large projects.

The development and deployment times have also been cut dramatically, with dhp Technology now able to deliver new systems

in half the time. “[EcoStruxure Automation Expert] has enabled us to significantly accelerate time-consuming and error-prone work steps such as programming and commissioning, significantly shortening the time to market for our folding solar roofs,” Diem explained.

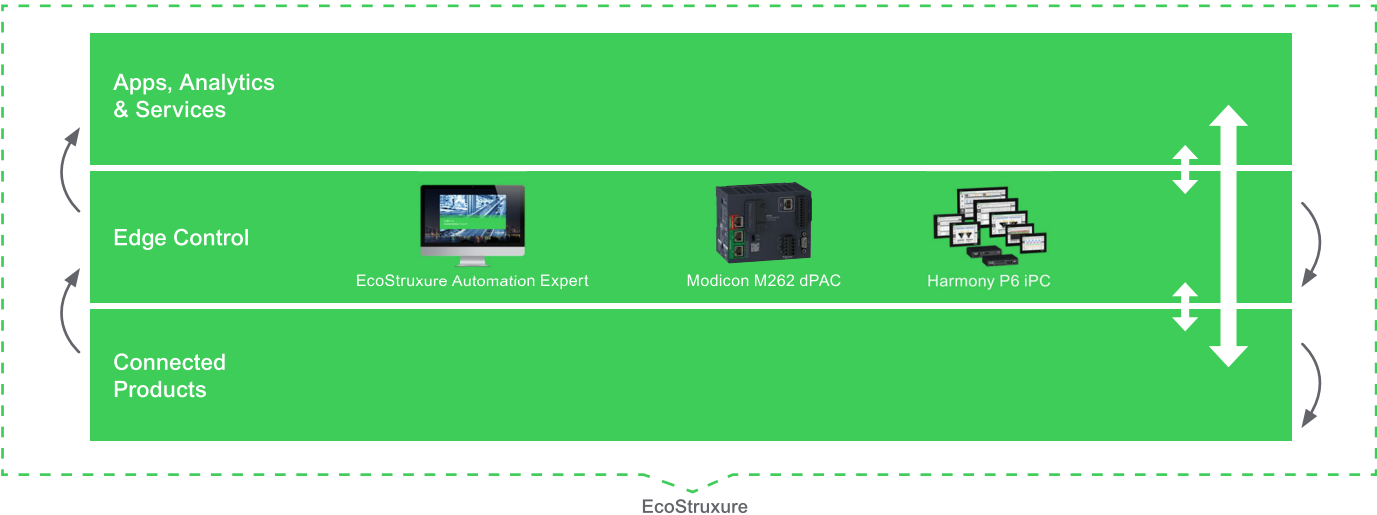
The collaboration between dhp Technology and Schneider Electric is just beginning. Plans are already underway to integrate solar roofs with EV charging stations, taking another step toward a more sustainable energy future.



“With EcoStruxure Automation Expert, we use an automation solution that offers us a unique combination of manufacturer independence and reduced complexity,”

Gian Andri Diem,  
Co-Founder and Managing  
Partner, dhp Technology

EcoStruxure Machine



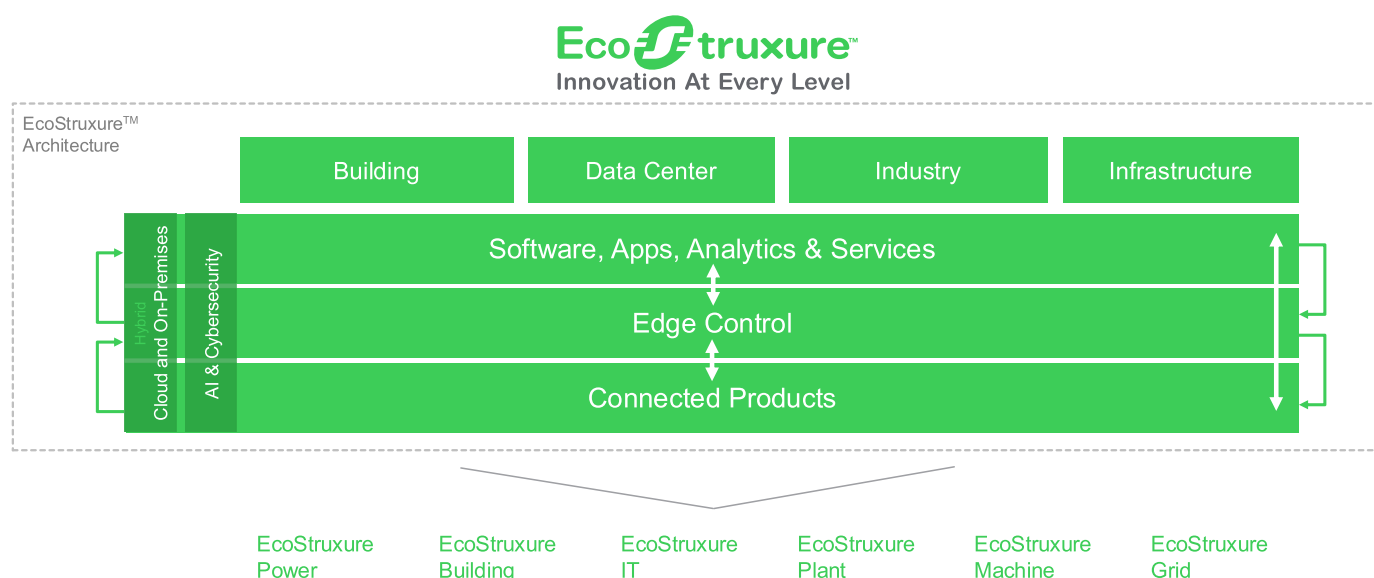
# EcoStruxure™

## Innovation At Every Level

### IoT-enabled solutions that drive operational and energy efficiency

EcoStruxure is our open, interoperable, IoT-enabled system architecture and platform. EcoStruxure delivers enhanced value around safety, reliability, efficiency, sustainability, and connectivity for our customers. EcoStruxure leverages advancements in IoT, mobility, sensing, cloud, analytics, and cybersecurity to deliver Innovation at Every Level.

This includes Connected Products, Edge Control, and Apps, Analytics & Services which are supported by Customer Lifecycle Software. EcoStruxure has been deployed in almost 500,000 sites with the support of 20,000+ developers, 650,000 service providers and partners, 3,000 utilities and connects over 2 million assets under management.



### Connected Products

The Internet of Things starts with the best things. Our IoT-enabled best-in-class connected products include breakers, drives, UPSs, relays, sensors, and more. Devices with embedded intelligence drive better decision-making throughout operations.

### Edge Control

Mission-critical scenarios can be unpredictable, so control of devices at the edge of the IoT network is a must. This essential capability provides real-time solutions that enable local control at the edge, protecting safety and uptime.

### Software, Apps, Analytics & Services

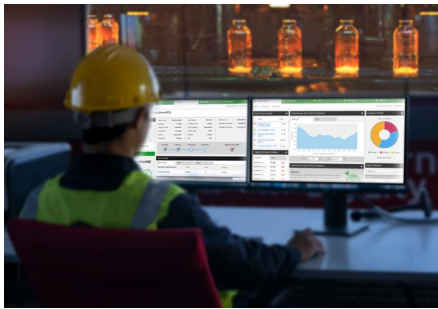
Interoperability is imperative to supporting the diverse hardware and systems in building, data center, industry, and grid environments. EcoStruxure enables a breadth of agnostic Software, Applications, Analytics & Services for seamless enterprise integration.

Find out more about EcoStruxure

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# Learn more



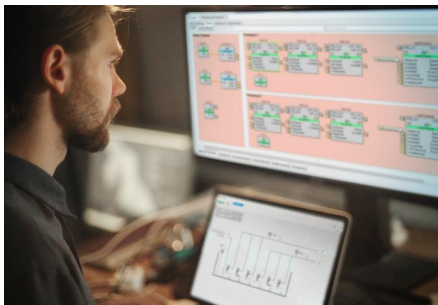
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