Q CELLS SYSTEM SOLUTIONS FOR SOLAR ARRAYS

PHOTOVOLTAIC MOUNTING SYSTEMS FOR PITCHED AND FLAT ROOFS
Q.MOUNT
THE VERSATILE MOUNTING SYSTEM FOR PITCHED ROOFS

Q.MOUNT IS THE Q CELLS PITCHED ROOF SOLUTION FOR ROOF TYPES OF ALL KINDS

To allow the reliable and safe installation of Q CELLS premium solar modules on roof shapes and roof coverings of all kinds, we have developed the Q.MOUNT system for pitched roofs. Q.MOUNT stands out from the competition thanks to its simplicity and fast, straightforward installation, as well as its excellent value for money. Our Q.PARTNER enjoys the advantage of independent system planning with the Q CELLS ROOFTOP PLANNER software that combines all of the planning steps needed in one system: module design, roof layout, inverter, yield simulation and static calculations, including wind and snow loads. We supply our customers with all components from a single source, thereby ensuring that they coordinate and harmonise perfectly with each other.

WITH Q.MOUNT, THERE ARE JUST FOUR SIMPLE STEPS TO A READY-TO-USE SOLAR SYSTEM

**STEP 1:** Planning of the system with the Q CELLS ROOFTOP PLANNER
- Module assignment plan
- Module interconnection
- Inverter design
- Cable plan

**STEP 2:** Creation of documentation
- Statics report with consideration of wind and snow loads
- Profitability calculation
- Parts list

**STEP 3:** Delivery
- Q CELLS supplies all components on time
- Q CELLS solar modules and, on request, directly to the construction site

**STEP 4:** Easy installation
- Installation of the Q CELLS solar modules with the Q.MOUNT supporting construction incl. module cabling and inverters

Q.MOUNT ONE SYSTEM, VARIOUS ROOF SHAPES

Q.MOUNT IS IDEAL FOR ALL TYPES OF ROOF SHAPE AND COVERING. ALL OF THE INDIVIDUAL PARTS COME FROM A MODULAR SYSTEM THAT CAN BE INTERCOMBINED AND, THANKS TO THE NEW CLICK-IN CENTRAL CLAMP, MAKE MODULE MOUNTING SIGNIFICANTLY EASIER.

**CORRUGATED FIBRE CEMENT ROOF**
The Q.MOUNT supporting construction is secured on corrugated fibre cement roofs with a self-tapping hanger bolt, including the pre-installed quick-mounting adapter.

**TILED ROOF**
The roof hooks offering three-way adjustment for tiled roofs allow flexible adaptation to any tiled roof requirements. Here too, the use of the pre-installed quick-mounting adapter keeps the installation time to a minimum.

**TRAPEZOIDAL SHEET ROOF**
On trapezoidal sheet roofs, Q.MOUNT impresses with a variety of possible solutions. We offer trapezoidal sheet bridges in various lengths, which are suitable for horizontal, vertical and single-layer use, as well as for cross connections.

**FOLDED SEAM ROOF**
Q.MOUNT also offers a stable, easy-to-install clamping solution for folded seam roofs and Kalzip sheet roofs that reliably connects the bearing profile of the supporting construction to the solar modules.
**Q.FLAT-G5**

**MORE THAN JUST A FLAT ROOF SYSTEM**

Q.FLAT-G5 is more than just a subconstruction for flat roofs: it forms the basis for an entire system solution from a single source.

The large, usually low-shade roofs of industrial and commercial buildings are the ideal location for a solar system. By using the electricity they generate themselves, your customers can become independent of rising electricity prices.

The carefully thought-out and functional Q.FLAT-G5 system solution supplies all components for simple and smooth assembly of the rooftop array.

Do you want everything from a single source and to be assured that the components coordinated one with another not only interact perfectly, but that you can also count on the services of your partner? We at Q CELLS, with our system solutions, are just the right contact you are looking for.

**WITH Q.FLAT-G5, THERE ARE JUST FOUR SIMPLE STEPS TO A READY-TO-USE SOLAR SYSTEM**

**STEP 1:** Planning of the system with the Q CELLS ROOFTOP PLANNER

- Module assignment plan
- Module interconnection
- Inverter layout
- Cable plan
- Ballast plan

**STEP 2:** Creation of documentation

- Statics report with consideration of wind and snow loads
- Profitability calculation
- Parts list

**STEP 3:** Delivery

- Q CELLS supplies all components on time and, on request, directly to the construction site

**STEP 4:** Easy installation

- Installation of the Q.FLAT-G5 system including module cabling and inverters

**Q.FLAT-G5**

**THE FAST AND RELIABLE SYSTEM FOR FLAT ROOFS**

The straightforward folding mechanism allows a time-saving installation thanks to fewer work steps, minimising the amount of work required immensely.

**QUICK INSTALLATION**

The fully integrated base profiles with simple folding mechanism save any laborious pre-assembly and reduce the operational steps.

**FEWER SCREWS**

The innovative design means that each module requires just one screw to secure it in place.

**FEWER INDIVIDUAL COMPONENTS**

The new Q.FLAT-G5 is mainly supplied pre-assembled and comprises just a base profile, ballast support and end clamp plate. This reduces the storage and logistics costs, as well as the amount of work required on the roof.

**LESS MEASURING WORK**

Once the system is aligned, no more measuring is needed. The ballast carriers serve as a distance gauge between the base profiles. As soon as the first base profile is aligned, the distances to the following base profiles result by hanging in the ballast carriers.

**KIND TO THE ROOF**

The building material is spared thanks to installation without penetration of the roof membrane. The ballast floats over the roof surface, preventing damage to the roof skin and the build-up of moss under the stones.

**LITTLE ADDITIONAL BALLAST**

The optimised design and use of base profile connectors means that the amount of ballast required is reduced. It is also possible to use various sizes of ballast stones that can not only be stowed in the ballast tray provided, but also directly in the base profiles.

**LONGEVITY AND ABSENCE OF STRESS**

The stability of the base profiles also ensures problem-free installation even when the roof is uneven, while additional mechanical loads on the modules are prevented.

**HIGH YIELDS**

The excellent yields are ensured almost independent of the system’s orientation, allowing a high degree of flexibility in the rooftop array’s design. With a significantly higher power density of over 170 Wp/m² compared to standard systems, Q.FLAT-G5 is the best solution for low-cost electricity production.
STEP 1
The base profiles, which are already supplied pre-assembled (including the building protection mat and central support) are placed on the roof and the central supports are simply folded out. The hinge on the folding mechanism is secured in its terminal position with light pressure. Attachment to the roof is not necessary, protecting the building fabric and significantly reducing the installation costs.

STEP 2
The base profiles are laid out on the roof and the ballast carriers hung in them. The ballast can already be positioned according to the ballast plan at this stage.

STEP 3
The Q CELLS solar modules are inserted into the central support and placed in the end clamp. During this step, the convenient cabling operation can be carried out using the optional cable clips. The solar module is lowered downwards.

STEP 4
The end clamp plate is put on and bolted into place. This one-off assembly design not only minimises the installation time but also reduces the mechanical load on the solar modules thanks to the floating suspension. Fixing an end clamp means that two adjoining modules are fastened at the same time – a further cost saving.

Q.CELLS OFFERS Q.PARTNERS A SOFTWARE SOLUTION - THE Q.CELLS ROOFTOP PLANNER - THAT COMBINES ALL OF THE PLANNING STAGES REQUIRED IN A SINGLE PROGRAM.

ALL-IN-ONE
The planning tool from Q.CELLS combines various programs and makes planning easier for you. Save time and resources by implementing all steps of the design in a single program.

ENTER AN ADDRESS – GET STARTED STRAIGHT AWAY
Simply enter the address of the object to the assigned and the roof will be displayed instantly via Google Maps. After selecting the roof shapes and forms, the areas are displayed automatically – these can then be expanded or reduced with just a few clicks. Areas to be left out or, for instance, chimneys can easily be defined and multiplied. Snow and wind load zones are automatically displayed and can also be detailed further.

SELECTING COMPONENTS
After selecting the modules and substructure, an automatic assignment including shadow simulation and cabling overview is performed automatically. It is possible to modify your planning at any time. The optional display in 3D is a further highlight that is sure to impress your customers. Export your data easily as a CAD file or PDF.

SIMULATION MADE EASY
Once you have selected the inverters and/or the storage solution, you are taken directly into the simulation, which previously had to be launched externally via PVsyst or PV*SOL software. The Meteonorm weather data that was preselected via the default settings can be changed if required. Local topography such as mountains can easily be taken into account.

EVERYTHING YOU NEED
This results in a structured list of all the materials you need, including prices, which you can easily export as an Excel document or a project report in PDF format.