



Intersolar: Innovations from K2 Systems

K2 Systems is once again combining strengths with K2 Buddy for monitoring snow loads, six new functions in the K2 Base planning software, a digital training campus and four new products. True to the motto "Connecting Strength", the company combines innovative mounting systems, digital technology and people with know-how and energy to advance sustainable solutions for solar installations.

At the energy trade fair "The smarter E" in Munich, which will take place from June 14 – 16, 2023, the photovoltaic mounting system manufacturer K2 Systems will present numerous innovations at its stand A6.280. The trade fair highlight of the globally active company from Germany is the K2 Buddy monitoring system, which digitally monitors snow loads and thus also makes it possible to extend its mounting system warranty from 12 to 20 years. K2 Systems will also be showing new functions in the free K2 Base software with AI-based automatic obstacle detection and a new interface to PV*SOL, which saves the installer valuable time in the planning phase. A new digital Resource Center also supports the onboarding of new colleagues with webinars, tutorials and various K2 Training learning paths that build up knowledge quickly in an engaging manner. Further safety for the installer is provided by optimised components for reliable mounting of large-format high-performance modules. In addition, there are four new mounting systems for areas including: façades, green roofs, carports and ground mounted.

"Faster and easier thanks to new product developments that are simultaneously digitally supported: Realising the energy transition with K2 - that is our drive. We are proud of the very good availability of our components and are constantly working on improving delivery reliability. Installers, system owners and module and component manufacturers benefit considerably from this. And it is precisely these successful stable partnerships that underline "Connecting Strength", our guiding principle," says Co-Managing Director Katharina David.

Trade fair highlight K2 Buddy: digital monitoring of snow loads

A focal point at the fair is K2 Buddy. It monitors snow loads on flat and pitched roofs digitally and in real time. The new monitoring system is the first solution from K2 Systems for mechanical monitoring: a weight tracker that can be quickly installed under a module measures the snow loads on the modules 24 hours a day. The system is connected to the smartphone of the system owner, for example, and provides clear information about the current conditions. The user-friendly app shows at a glance whether action is required. In the event of high load values, it immediately transmits a push notification to the end device, informing the end user to clear the snow.



If desired, the installer can also view all K2 Buddys installed by him via the app or web application and is thus able to evaluate the situation. And with a history overview, the measured values can also be viewed retrospectively.

Severe weather events are occurring more and more frequently. Heavy snowfalls in particular can affect the service life of photovoltaic systems, especially if larger modules with lower limit values are used. This occurs more and more frequently and can lead to damage to the modules and higher maintenance costs. Using K2 Buddy ensures the safety of photovoltaic systems even in snowy regions and avoids unnecessary maintenance. This means more profitability for service companies and more safety for system owners.

More information: <https://k2-systems.com/en/digital-services/k2-buddy/>

New functions in K2 Base: Obstacle detection with AI and planning for roof-parallel flat-roof systems

The free planning software K2 Base is now also intelligent. The new obstacle detection function uses artificial intelligence to recognise and automatically add elements such as chimneys, skylights or other obstacles once they have been drawn in. This eliminates the need for the planner to manually draw in various obstacles, thus considerably saving time.

In addition: With the Dome Zero mounting system, planning for flat roof systems parallel to the roof is now also possible. Planning is further simplified by optimised thermal separations, the definition of which is automatically available to the planner in K2 Base. From now on, individual module fields are distributed even more evenly and the weight to be ballasted is thus optimally distributed.

More about the obstacle detection: <https://k2-systems.com/en/company/news/pv-planning-in-k2-base-even-faster-thanks-to-ai/>

Info about the Dome Zero System: <https://catalogue.k2-systems.com/mounting-systems/flat-roof-systems/k2-dome-zero-system/>

Expansion of the K2+ interface to PV*SOL premium and the Eturnity solar calculator makes planning easier

With K2+, the planning tool K2 Base now also enables the direct transfer of project data to and from PV*SOL premium from Valentin Software. In the future, these values will therefore no longer have to be entered several times during photovoltaic planning. This saves time and money and avoids the risk of values not being entered or updated correctly. With the addition of PV*SOL premium, K2 Systems expands the existing interfaces to SolarEdge, SMA, Fronius, Kostal, GoodWe and archelios™ Pro with another important data exchange option. This facilitates the planning of photovoltaic systems with K2 mounting systems. A further connection to the solar calculator from Eturnity AG will also take place shortly. The data can then also be imported or exported to and from the solar calculator, eliminating the need for multiple data entries for the planner.



Everything you need to know is available here: <https://k2-systems.com/en/company/news/k2-base-now-with-interface-to-pvsol-premium-transfer-pv-project-data-quickly-and-without-errors/>

K2 Base now also enables the optimal design of photovoltaic systems on hipped roofs

The free planning software K2 Base can now be used not only for flat, gable and monopitch roofs. In the future, photovoltaic systems on hipped roofs can also be planned in offset and thus space-optimised placement, including obstacle recesses and shadow casting views. K2 Systems thus expands the range of installations that can be planned with its K2 Base software.

A hipped roof usually has two trapezoidal and two triangular roof surfaces - i.e. four potential substrates for the photovoltaic system. However, the pointed roof shapes limit the usable area. For a particularly high yield, it is therefore important to arrange the modules in the most space-saving way. K2 Base makes this possible.

Photovoltaic planning now also direct the building site: with finger and tablet

With the K2 Base planning tool, roof areas can be quickly drawn and photovoltaic projects easily planned. This means a significant time saving in the office and thus a quicker return to the construction site. Now the specialists at K2 Systems have optimised the planning software for touch screen. This means that all steps - including drawing in the roof surfaces - can be carried out with a finger or stylus. Installers therefore no longer have to leave the construction site to plan the substructure and can do everything comfortably on their tablet.

Drone images, plans or blueprints can now be uploaded to K2 Base

With the K2 Base planning tool, roof surfaces for the selected property can be drawn with just a few clicks thanks to convenient Google Maps integration and intuitive graphic tools. However, projects often have more suitable image data than can be achieved via satellite imagery. For these cases, K2 Base now offers a new image upload feature. This allows drone images, high-resolution aerial photos, technical drawings, floor plans and satellite images from Bing & Co to be used for planning solar installations.

New: Company accounts for K2 Base

With the help of new company accounts, all team members within a company can now edit and share their projects with each other. In this way, K2 Systems creates better data management and thus enables optimal cooperation. Errors due to incorrectly filed files or editing of old versions can be avoided. Even in the event of illness or holidays, all members can access the planning files at any time via company access using the K2 Base dashboard. With this collaborative solution, K2 Base makes a valuable contribution to successful teamwork during the planning of photovoltaic installations.



The associated user administration runs uncomplicatedly via MyK2. With a MyK2 account, the user is automatically logged in to all K2 services such as the planning software K2 Base, the K2 DocuApp or the product catalogue. And here, too, there are new features, such as the downloading of training certificates or the quick creation of cost estimates directly at the customer's location.

Free Digital Education with the Resource Center

For newcomers in particular, K2 Systems has created a digital campus in the form of the K2 Resource Center, where weekly live webinars, easy-to-follow tutorials, helpful training and certifications as well as valuable downloads are available. "We support our customers in every phase - from an optimal start, through planning all the way to a professional completion of the installation and even monitoring. Both newcomers to the industry, but also experienced professionals, will find valuable knowledge about the planning and installation of photovoltaic systems in the new Resource Center," says Willem Haag, Co-Managing Director K2 Systems.

More info: <https://k2-systems.com/en/resource-center/>

New products: Mounting systems for façades and green roofs

K2 Systems now also offers a mounting system for façades. It is suitable for trapezoidal sheet metal and sandwich panels as well as for masonry and concrete. In addition, the modules can be clamped or hung on the frame. In this way, planners achieve high flexibility with few components. At the same time, the new system ensures good rear ventilation - and it looks good.

So after pitched and flat comes vertical: the new mounting system adds another dimension to the areas that can be used for energy generation. The standardised system for façade enables façade element manufacturers to find the right K2 system solution for sandwich, concrete or masonry.

Green roofs can also be fitted with K2 mounting systems in the future: The GreenRoof Vento System facilitates installation on green roofs. Thanks to the greater distance from module to roof, the new system solution from the K2 product family reliably prevents the modules from being shaded by excessive vegetation. At the same time, the GreenRoof Vento is statically optimised. It allows portrait and landscape elevation at 10° and 15° with maximum module sizes of 2400 mm x 1350 mm. The system can also be conveniently used on existing roofs. During development, the K2 team paid attention to not disturb the greenery as much as possible. The stand feet provide a firm hold, but are designed small enough so that mosses and succulents continue to receive light and water and are therefore able to continue to make their valuable contribution. A design of the new system in K2 Base is planned for the third quarter of 2023.

The use of a photovoltaic system on green roofs also makes sense. The modules benefit from the cooling effect of the low-growing plants. The plants store water, which cools the environment when it evaporates. This increases the performance and thus the yield of the photovoltaic system. However, at the same time there are challenges compared to mounting on gravel or bitumen roofs: The plants



must be kept at a distance, so that they do not shade the photovoltaic modules which would reduce the energy yield.

New mounting systems for carports and ground mounted systems

K2 Systems now also has a mounting system for carports in its portfolio. Due to the photovoltaic obligation on carports in many German federal states, this area is expected to grow strongly in the future. "We want to offer our customers mounting solutions not only for roofs and facades, but also for covered parking spaces," says Katharina David. For this, the K2 experts have developed a standardised and at the same time flexible system as a complete solution.

And that's not all: in addition to the various roof substructures, the mounting system for façade and that for carports, K2 Systems has also expanded its range to include ground mounted systems. Market analyses have shown that there is an opportunity in the market for mounting systems for small to medium-sized systems in the outdoor sector. The company is closing this gap and has developed a new ground-mounted system for this purpose, which will be presented at this year's Intersolar. Whether anchored in the ground or in concrete - the system with aluminium rails enables quick installation for systems with up to 10 megawatts.

About K2 Systems: We connect strengths: innovative mounting systems, digital technology and people with the know-how and energy to drive sustainable solutions.

Since 2004, K2 Systems has stood for global power generation from solar energy. The heart is the development of easy-to-install mounting systems that are precisely tailored to the needs of our customers. The soul is the common spirit of all employees. Together, we define technical innovation and set new service standards digitally as well.

At our headquarters in Renningen and our nine international locations, we develop and sell mounting systems together with 400 employees for the roofs of this world.

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Connecting Strength

You can download corresponding image material here: https://k2-systems.com/wp-content/uploads/2023/06/K2-Systems_Press-Images_Intersolar-2023.zip

K2 Buddy



K2 Base: obstacle detection



K2 Base: PV*SOL premium



K2 Base: hipped roofs



K2 Base: touch





Connecting Strength

Resource Center



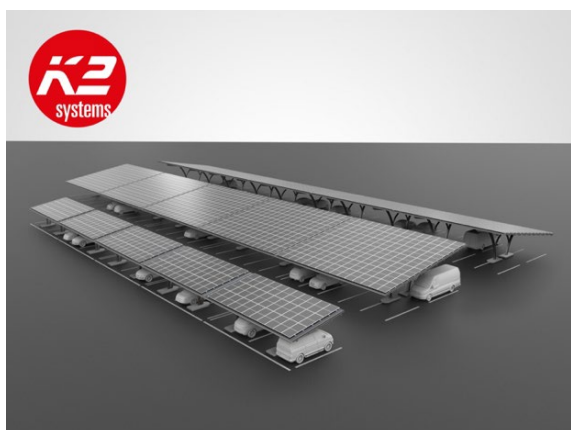
Façades



Green roof



Carport



Ground mounted

