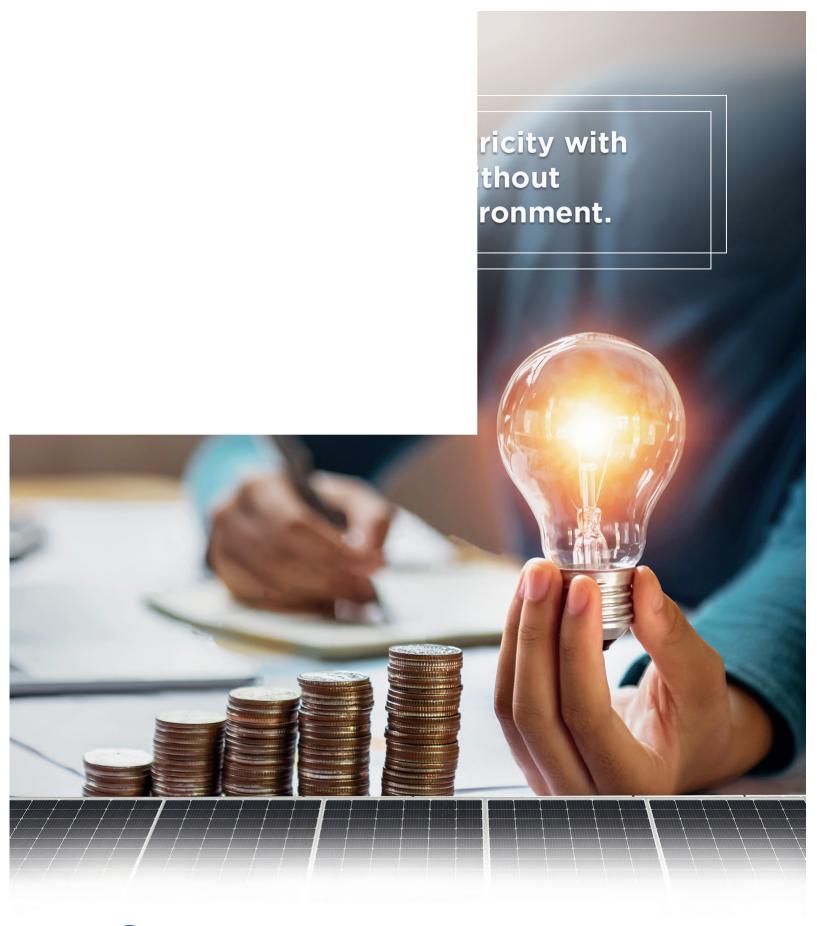
2023/2024

PRODUCT CATALOGUE

Solar Energy Solutions



GERMAN-based company •••





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Register Court Munich: HRB 213239



TommaTech® as a German based company aims to promote the use of solar energy by pioneering new technologies to meet the energy needs of our planet with clean resources, support a sustainable future, contribute to the world economy and leave a livable nature to future generations.

TommaTech®, as a credible, innovative and competitive organization, oers solar equipment and solutions that target all segments of society and economy with the ultimate objective to add value to homes and businesses while protecting the environment without compromising on quality and customer satisfaction.

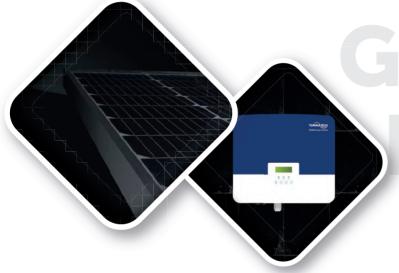
From our headquarters in Garching - Germany we export reliable solar equipment and solutions at aordable prices to more than 57 countries worldwide.





TommaTech® aims to extend the use of solar energy around the world by pioneering new technologies to create reliable and financially viable solar products for everybody. Among others, our experienced team of German Engineers recently:

- -Launched the next generation of hybrid and on-grid inverters.
- -Optimized our plug and play, IP67 protected solar irrigation inverters.
- -Developed and designed intelligent solar panels manufactured in Industry 4.0 Euro 1 norm facilities.







TommaTech®, as a credible, innovative and competitive organization, offers solar equipment and solutions that target all segments of society and economy with the ultimate objective to add value to homes and businesses while protecting the environment without compromising on quality and customer satisfaction.

From our headquarters in Garching - Germany we export reliable solar equipment and solutions at affordable prices to more than 57 countries worldwide.



German Quality Assurance & Certification

Led by our team of German engineers, we continuously develop our solutions by integrating the latest technologies, increasing our scope and improving the durability, design and performance. However, as assurance of our continuously reliable quality, we were rewarded with many certificates.

Furthermore, and uniquely in solar power industry, our 30-year linear performance guarantee of our solar panels is backed up by Allianz SE insurance company, who additionally covers any bodily or material damage caused through our solar panels.

Among others, our products comply with CE, as well as different ISO, VDE and IEC standards, which is confirmed regularly by independent test institutions such as TÜV SÜD, TÜV Rheinland, TSE etc.

















TOMMATECH SOLAR PANELS

RESIDENTIAL ROOFTOP SOLAR PANELS

TT108PM10 SOLAR PANELS

TT144TN10 SOLAR PANELS

12 BUSBAR HALF-CUT PERC MONOCRYSTALLINE

10 BUSBAR HALF-CUT PERC MONOCRYSTALLINE

TOPCON - PERC MONOCRYSTALLINE

12 BUSBAR HALF-CUT BIFACIAL PERC MONOCRYSTALLINE

WATERPROOF SOLAR ROOF TILES

SMALL SERIES

TRANSPARENT BIPV SOLAR PANELS

FLEXIBLE SOLAR PANELS



RESIDENTIAL ROOFTOP SOLAR PANELS

rommarecn® developed several solar panels optimized for the installation on roofs. Our compact, easy to install and yet powerful solar panels are also available as Dark Series, Black&White or Silver versions.

TT108TN10 Solar Panels

415Wp / 420Wp / 425Wp / 430Wp / 435Wp



With our 415 - 435Wp solar modules, we are once again setting new standards and staying true to our promise of continuously providing more efficient products for everyone. Based on the latest TOPCon cell technology in combination with our unique manufacturing process, these solar panels offer up to 25% more yield compared to traditional products resulting in long-term cost savings and reduced environmental impact.

Key Facts

PV Power Range: 415Wp - 435Wp Cell Technology: TOPCon Monocrystalline 108TN10 (182x91mm / Half-Cut) 16BB n-Type

Module Efficiency: Up to 22.28 Dimensions: 1.722m x 1.134m

Frame Thickness 30mm Weight: 21.45kg





Self-Cleaning & Durability **Anti-Reflection Glass**

Key Facts

PV Power Range: 395Wp - 410Wp **Cell Technology:** PERC Monocrystalline

M10 (182x91mm / Half-Cut) 10BB **Module Efficiency:** Up to 21.20

Dimensions: 1.707m x 1.133m **Frame Thickness** 30mm / 35mm

Weight:

22.0kg

High Conversion Outstanding Low Efficiency **Irradiation Glass**



Installation

TT108PM10 Solar Panels

395Wp / 400Wp / 405Wp / 410Wp

With our TT108PM10 solar panels series manufactured with 108 highly efficient 10 Busbars, MonoPERC Half-Cut cells, we push the limits of rooftop solar installation beyond any borders. Based on selected, high-quality materials coupled with our high manufacturing standards, we offer uniquely reliable solar modules that generate long-term clean energy in minimal space with outputs ranging from 395Wp to 410Wp.





TT144TN10 Solar Panels

560Wp / 565Wp /570Wp / 575Wp / 580Wp

Tomrin the optin power techniques funds produinnov every energy

TommaTech®'s TT144TNFB TOPCon solar panels in the 560-580Wp power classes are designed to optimize the generation of renewable, green power. Based on the latest M10 TOPCon cell technology, these modules combine three of the fundamental components of TommaTech®'s product philosophy Maximum conversion rates, innovation drive and robust designs so that everyone can enjoy the full potential of solar energy for the long term.

Key Facts

PV Power Range: 560Wp - 580Wp

Cell Technology: TOPCon Monocrystalline M10 (182x91mm / Half-Cut) 16BB

Module Efficiency: Up to 22.50

Dimensions: 2278mmx1134mm

Frame Thickness 30mm / 35mm

Weight: 32.0kg







High Conversion Outstanding Low Efficiency Irradiation Glass

Easy Installation

Half EGut Multi-Busbar

Key Facts

PV Power Range: 530-675Wp

Cell Technology: PERC Monocrystalline M12 (210x105mm / Half-Cut) 12BB Module Efficiency: Up to 21.73 Number of Cells: 108 / 120 / 132 Weight: 28.5 / 31.0 / 34.5kg

12 Busbar Half-Cut PERC Monocrystalline

530 - 675Wp

TommaTech® new Half Cut solar panels with 108, 120 or 144x 12BB 210mm PERC monocrystalline solar cells combine the latest technologies in solar power industry to guarantee highest efficiency on smaller areas as well as minimal losses due to partly shaded solar panels. Especially, the 12BB technology reduces the electric and optical losses inside the cell, thus maximizing the output. Consequently, they are the most economic choice for ground or roof mount solar power plants of any size.



High Conversion Efficiency



Outstanding Low Irradiation Glass



Excellent Durability



Self-Cleaning & Anti-Reflection Glass





10 Busbar Half-Cut PERC Monocrystalline

530 - 595Wp

Key Facts

PV Power Range: 530 - 595Wp

Cell Technology: PERC Monocrystalline

M10 (182x91mm / Half-Cut) 10BB Module Efficiency: Up to 21.50 Number of Cells: 144 / 156 Weight: 29.0 / 31.0kg



10BB PERC monocrystalline solar panels made of 144 or 156x 182mm solar cells are a solid and economical solution for large scale roof or ground mount solar power plants. The increased useable solar cell area results in high efficiency and improved solar electricity generation while the 10 busbars reduce the resistive losses in the cells significantly making the solar panel the preferred solution for your project.









Key Facts

PV Power Range 415/435Wp-360/385Wp Cell Technology: PERC Monocrystalline (166x83mm / Half-Cut) 9BB - TOPCon 108 (182x91mm /Half-Cut) 16BB

Module Efficiency: Up to 21.36-22.28

Number of Cells: 120 / 108 Weight: 20.3 / 21.45kg



TOPCon - PERC Monocrystalline

415-435Wp/360-385Wp

TommaTech® 's Dark Series solar modules add a visual finishing touch to any solar installation, allowing for highly aesthetic projects. Beautify your building, carport or veranda while generating renewable electricity. TommaTech® offers Dark Series versions of all solar modules.



High Conversion Efficiency



Outstanding Low Irradiation Glass



Excellent Durability



Self-Cleaning & Anti-Reflection Glass





12 Busbar Half-Cut Bifacial PERC Monocrystalline

530 - 675Wp

Key Facts

PV Power Range: 530-675Wp

Cell Technology: Bifacial, PERC Monocrystal-

 Iine M12 (210x105mm / Half-Cut) 12BB

 Module Efficiency:
 Up to 21.73

 Number of Cells:
 108 / 120 / 132

 Weight:
 28.5 / 31.0 / 34.5kg



TommaTech® Bifacial solar panels can generate up to 30% additional electricity due to the extra power generated from the rear of the panel depending on the ground and environment. Thus, they are used preferably for ground mount solar power plants as well as facade and other BIPV installations.













Waterproof Solar Roof Tiles

360 - 465Wp

Key Facts

PV Power Range: 360 - 465Wp

Cell Technology: PERC Monocrystalline

M6 (166x83mm / Half-Cut) 9BB

Module Efficiency: Up to 21.36

Number of Cells: 120 - 144

Weight: 20.3 - 26kg



Replace your tiles, roof sheets or carport covers by clean energy generating solar roof tiles which are equipped with a special frame to close the gap between models thus ensuring a waterproof installation. At TommaTech® we offer Solar Roof Tiles also in your required size with polycrystalline, half-cut or PERC monocrystalline solar cells.





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Key Facts

PV Power Range: 60 - 250Wp

Cell Technology: PERC Monocrystalline

Small Cells M12 (Half-Cut) 36-48PM12

Module Efficiency: Up to 28.10

Number of Cells: 36 - 48

Weight: 4 - 13.46kg

Small Solar Panels

60 - 250Wp

To help everybody enjoying a more comfortable life, we developed Small Solar Panels, which offer a highly economic solution for small power solutions. Based on Multi Busbar PERC monocrystalline solar cells, TommaTech® offers the right solar panels for any project and every electric equipment.













Key Facts

PV Power Range: 240 - 400Wp

Cell Technology: BIPV PERC Monocrystalline,

Half-Cut 12BB

 Module Efficiency:
 Up to 16.33

 Number of Cells:
 48 / 48 / 64 / 80

 Weight:
 29.13/48.10kg

Transparent BIPV Solar Panels

240 - 400Wp

With BIPV (Building Integrated Photovoltaic) Solar Panels, TommaTech® enables the conversion of any area such as your roof, facade, balcony or wintergarden into a clean energy generating solar power plant. Due to the twice EVA laminated double glass, TommaTech® BIPV Solar Panels boast excellent durability and stress properties.



BIPV Technology

BIPV (Building Integrated PhotoVoltaic) solar family, TommaTech® enables panel ways to utilize any available area for a maximum clean and free solar power generation. Designed by our team of experienced German engineers, panels of standardized BIPV solar offer different sizes with 240Wp, 320Wp and 400Wp additionally looking forward manufacture further solar panels tailored to your needs.









Flexible Solar Panels

110- 170Wp

Key Facts

PV Power Range: 110 - 170 Wp
Cell Technology: Back-Contact
Module Efficiency: Up to 18.5
Number of Cells: 32 / 48
Weight: 2.3 / 3.2kg



TommaTech®'s next generation flexible solar panels are designed with highly efficient, back contact solar cells. Hence, the flexible panel series stands out in its product class with high power capacity on a small area as well as a high charging capacity. Manufactured using premium lightweight polymer materials, TommaTech®'s flexible panels offer easy handling, fast installation and up to 30° degrees of panel flexibility.



Excellent Light
Transmit with ETFE



IBC Cell Technology









than other panels, they are ideal for installations on roofs that cannot bear heavy loads.

TOMMATECH INVERTERS

UNO ATOM Single MPPT
UNO HOME Dual MPPT
TRIO ATOM-K Dual MPPT
TRIO PLUS-K Dual MPPT
TRIO HYBRID-K Three Phase Hybrid
UNO HYBRID-K Single Phase Hybrid
TommaTech® High Voltage Batteries
TommaTech® LiFePO₄ Batteries
EV - Chargers



ON-GRID INVERTERS



UNO ATOM Single MPPT

0.6kW / 0.7kW / 1.1kW / 1.5kW / 2.0kW / 2.5kW / 3.0kW / 3.3kW / 3.68kW







TommaTech® Uno-Atom string inverters are engineered to be installed in the smallest of spaces without lacking performance. With a maximum efficiency of 98% and a market leading low start-up voltage of 55V, Uno-Atom inverters ensure an outstanding performance, allowing you to harvest the maximum amount of energy possible from your PV solution, whether installed inside or outside.

Key Facts

AC Output Power Range: 600W - 3.68kW

Max. PV Input Voltage: 550V **Number of MPPTs:** 1

MPPT Starting Voltage: 45 / 55V

DC/AC Ratio:

Single Phase

Low Start-Up Voltage



Small & Lightweight



Key Facts

AC Output Power Range:

600V Max. PV Input Voltage: **Number of MPPTs:**

MPPT Starting Voltage: 70V DC/AC Ratio: 1.5

Single Phase



"Smart Plug" **Load Control**



Lightweight



3kW - 6kW

UNO HOME Dual MPPT

3.0kW / 3.3kW / 3.6kW / 4.2kW / 4.6kW / 5.0kW / 5.5kW / 6.0kW

To offer the best solution for every customer, we developed 8 phase string inverters ranging 3kW to 6kW. The wide voltage range of two inbuilt MPPTs allows for harvesting with a maximum efficiency of 97.8%. Additionally, TommaTech® Uno-Home plug & play inverters with an LCD touch screen are IP65 rated and can be monitored online with a Wi-Fi accessory.









ON-GRID INVERTERS

TRIO ATOM-K Dual MPPT

3.0kW / 4.0kW / 5.0kW / 6.0kW / 8.0kW / 10.0kW/ 12.0kW / 15.0kW



With the latest Trio-Atom K-Series inverters, TommaTech® continues to set new standards in the residential solar market. Ranging from 3kW to 15kW and equipped with two highly efficient MPPTs, TommaTech®'s new three-phase inverters maximize solar energy utilization with exceptionally high maximum PV input capacities.

Key Facts

Three Phase

AC Output Power Range: 3kW - 15kW

Max. PV Input Voltage: 1,000V

Number of MPPTs: 2

MPPT Starting Voltage: 150V

DC/AC Ratio: 1.5











Key Facts

AC Output Power Range: 8kW - 30kW
Max. PV Input Voltage: 1,100V
Number of MPPTs: 2 / 3
MPPT Starting Voltage: 200V
DC/AC Ratio: 1.5

Three Phase



High fficiency



IP66



High PV Voltage

TRIO PLUS-K Dual MPPT

8.0kW / 10.0kW / 12.0kW / 15.0kW / 17.0kW / 20.0kW / 25.0kW / 30.0kW

Ranging from 8kW to 30kW, TommaTech® Trio Plus K-Series Dual and Triple MPPT on-arid inverters offer maximum flexibility thanks to a market-leading PV input voltage of 1.100V and maximum input currents of 20A for high-power solar panels. This, combined with maximum efficiencies of 98.5%, various communication and online monitoring options as well as IP66 design, make these inverters your preferred choice for any residential solar solution.







TommaTech® On-Grid inverters provide unrivaled performance and allow you to harvest the maximum possible amount of energy from your solar panels.



HYBRID INVERTERS

Key Facts

AC Output Power Range: 5kW - 15kW Max. PV Input Voltage: 1.000V

Number of MPPTs: 2

200V **MPPT Starting Voltage:**

DC/AC Ratio: 1.2 / 1.5

Battery Voltage: 180V - 800V

Three Phase



Output





Function

TRIO HYBRID-K Three Phase Hybrid

5.0kW / 6.0kW / 8.0kW / 10.0kW / 12.0kW / 15.0kW

TommaTech®'s Trio-Hybrid K-Series three phase inverters are the preferred solution for both residential and commercial projects as hey support unbalanced phase output, are equipped with dual protection for the BMS and can be controlled remotely through multiple communication options. The inverters, which are available in six power options between 5.0kW and 15.0kW can be equipped with up to 46kWh storage, each. Furthermore, they can be installed in parallel allowing for solutions of up to 150kWh and 460kWh storage.







UNO HYBRID-K Single Phase Hybrid

3.0kW / 3.68W / 5.0kW / 6.0kW / 7.5kW





CE

TommaTech®'s Uno-Hybrid K-Series single phase inverters with a maximum efficiency of 97.6%, advanced PV array power, lower start-up voltage of 90V and maximum PV string voltage of 600V are compatible with our high voltage lithium-ion as well as regular lead acid batteries. It offers plug and play installation optimizes self-consumption through export control. There are five power options between 3.0 kW and 7.5 kW.

Key Facts

AC Output Power Range: 3kW - 7.5kW

Max. PV Input Voltage: 600V **Number of MPPTs:** 2 **MPPT Starting Voltage:** 90V DC/AC Ratio:

Battery Voltage: 80V - 480V

Three Phase













LITHIUM BATTERIES

Key Facts

Capacity Range: 5.8kWh - 46.0kWh

Battery Technology:: LiFePO₄ **Nominal DC Voltage:** 100V - 524V >6.000 Max. Number of Cycles:

Warranty: 10 Years







TommaTech® High Voltage Batteries

5.8kWh GeneralPack / BoosterPack

Maximize your solar benefits with our durable and scalable battery solutions. The safest LiFePO₄ technology ensures long term and high-performing operation with more than 6000 life cycles at 90%DoD with marginal self-consumption. Our GeneralPacks with inbuilt BMS can eortlessly be upgraded with up to 3 BoosterPacks to increase backup times and savings.



TommaTech® High Voltage Batteries

Hightech Power 3.0kWh



Maximize your solar benefits with our durable and scalable battery solutions. Warranty: The safest LiFePO₄ technology ensures long term and high-performing operation with more than 6000 life cycles at 90%DoD with marginal self-consumption. Up to 4 of our TT-3.0kWh batteries can be equipped effortlessly with a BMS for maximal customization.

Key Facts

Capacity Range: 3.0kWh - 12.0kWh

Battery Technology: LiFePO₄ 90V - 464V **Nominal DC Voltage:** >6.000 Max. Number of Cycles: 10 Years







Key Facts

Capacity Range: 0.72kWh - 4.8kWh

Battery Technology: LiFePO₄ **Nominal DC Voltage:** 12V - 48V >4.800 Max. Number of Cycles: Warranty: 2 Years







TommaTech® LiFePO, Batteries

IP65 / IP67 Battery Series

Designed with the latest generation components, TommaTech® LiFePO₄ Lithium Batteries are available in a variety of capacities at three voltage options as 12.8V, 25.6V, 51.2V. Combining aesthetic appearance with TommaTech® performance, Lithium Batteries offer all the capacities they have unlike conventional batteries and also have considerably higher cycle number and usage time with the contained technology.





Key Facts

Phases / Cables: Single Phase /

Three Phase

AC Output Power Range: 7.2kW - 22kW 230V - 400V **AC Output Voltage:**

Dimensions:

Weight: 5.6 - 6.2kg Warranty: 3 Years









EV - Charger Uno-Trio

7.2/ 11.0/ 22.0

249x370x142 mm TommaTech® EV Chargers allow quick and simple charging of electric vehicles with dierent charging standards via Type II connectors in Eco-Mode, Fast-Charging and Custom-Mode. Based on their smart design, the EV Chargers can be installed indoor and outdoor and operated within a high temperature range, which makes TommaTech® EV Chargers the preferred choice for residential, office or public applications. Additionally, the compatibility TommaTech® Trio and Uno Hybrid Inverters allow the charging of stored solar electricity from the battery at night thus enabling highest utilization of charging assets.







