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LITHIUM BATTERY & FLEXIBLE PANEL CATALOGUE





For a cleaner **World**

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5 Ws and H with TommaTech LiFePO₄ Lithium Battery

WHAT IS LiFePO₄ LITHIUM BATTERY?

LiFePO₄ (Lithium Iron Phosphate) is a type of lithium ion battery. Made using the chemical compound lithium iron phosphate, these batteries offer advantages such as high safety, long life and superior performance. Because of these features, they are a preferred battery technology for electric vehicles, solar energy storage systems and portable electronic devices. In addition, their use is rapidly increasing due to their more environmentally friendly and reliable nature.

HOW DOES A LiFePO₄ LITHIUM BATTERY WORK?

The DC voltage generated in solar panels is regulated according to the charging voltage of the battery through charge controllers or inverters and charges the battery. While devices selected according to the nominal voltage of the battery can charge the battery from the grid, in a system using an inverter, the battery can be charged from both the grid and solar panels. After reaching full charge, the battery is discharged by transferring energy to the connected devices via the inverter.

WHY LiFePO₄ LITHIUM BATTERY?

They are preferred in closed areas and portable power supplies due to their features such as high performance, fireproof, non-explosive structure, light weight, superior performance, fast charging and less maintenance.

WHERE CAN LiFePO₄ LITHIUM BATTERIES BE USED?

Houses and businesses with solar energy systems, boat, yacht and caravan systems, electric vehicles such as golf carts, electric bicycles and scooters, forklifts; traffic lights, security cameras, parking meters and lighting systems in public spaces are examples of where lithium batteries are used.

WHEN TO USE THEM?

Lithium batteries are energy storage systems developed for storing and using energy in off-grid systems. They are suitable for use in vineyards, gardens and chalets. It provides energy to all devices as home electricity. It can also be used as backup power in critical situations in grid-supported systems. Compared to other battery chemistries, its light weight and high capacity provides easy transportation of stored energy. Lithium batteries are the most suitable solution for indoor areas with their high performance use in small areas such as caravans and boats and their fireproof, non-explosive structure.

WHO USES IT?

Lithium batteries are preferred by solar energy system installers, yacht, boat, caravan owners, spare parts repairers, electric transport vehicles and construction machinery manufacturers for areas with energy storage demand.





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Our LiFePO₄ Products



**MODULAR SERIES
LFP LITHIUM BATTERY**
12.8V-102Ah



**MODULAR SERIES
LFP LITHIUM BATTERY**
12.8V-204Ah



**MODULAR SERIES
LFP LITHIUM BATTERY**
25.6V-102Ah
25.6V-204Ah
51.2V-102Ah



**RACK SERIES LFP
LITHIUM BATTERY**
51.2V-102Ah



**CUSTOM-MADE
LITHIUM BATTERY**



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ENERGY STORAGE SYSTEMS

BESS/ Container
(Battery Energy Storage Systems)



Residential Storage

Boats and Yachts



Caravan and Portable Systems



Construction Machinery



Forklift Truck



Golf Carts



Cleaning Vehicles



E-Scooters



Our Battery Solutions

RESIDENTIAL STORAGE



GOLF CARTS



CARAVAN AND PORTABLE SYSTEMS



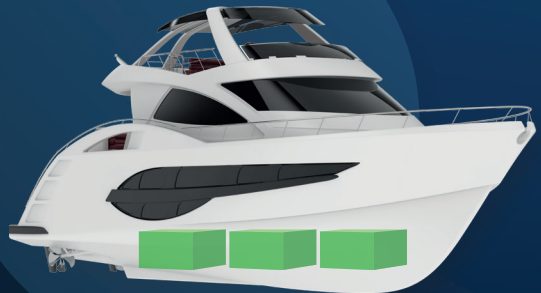
CLEANING VEHICLES



E-SCOOTERS



BOATS AND YACHTS



FORKLIFT TRUCK



TOMMATECH LFP LITHIUM BATTERY

MODULAR SERIES



- BTR-P-12.8V-102Ah
- BTR-P-12.8V-204Ah
- BTR-P-25.6V-102Ah
- BTR-P-25.6V-204Ah

LFP Lithium Battery

TommaTech new generation low voltage lithium batteries offer unique solutions for energy storage. With a long life of up to 8000 cycles, high energy density, high quality and performance, TommaTech lithium batteries stand out with their functional and eco-friendly structure.

TommaTech Lithium Batteries are designed with heat-resistant and high performance LiFePO₄ battery technology. At the same time, lithium batteries equipped with temperature sensors are presented to users with a durable metal case. BMS (Battery Management System) with balancing function is used in TommaTech Lithium Batteries designed with the concept of safety and quality. Batteries with Al-Cu alloy conductive busbars allow parallel connection without loss of performance.



- Great performance based on the latest generation of LiFePO₄ technology
- Effective usage structure with active balancing BMS technology
- Long lifespan up to 8000 cycles
- Maximum 0.5C Charge / Discharge
- Aesthetic, compact and durable metal cabinet design
- Different product options according to needs
- Temperature sensor and heat-resistant bracket
- IP20 - IP65 compatible metal cabinet and connector components
- LFP Lithium Batteries allow up to a maximum of 16 parallel connections without loss of performance.

Product Package Contents

- User Manual
- Battery to battery power cable
- Battery to battery communication cable
- Battery to inverter communication cable
- Grounding cable

TOMMATECH LFP LITHIUM BATTERY

MODULAR SERIES

TECHNICAL SPECIFICATIONS	BTR-P-12.8V-102Ah	BTR-P-12.8V-204Ah	BTR-P-25.6V-102Ah	BTR-P-25.6V-204Ah
ELECTRICAL SPECIFICATIONS				
Nominal Voltage [V]	12.8	12.8	25.6	25.6
Nominal Capacity [Ah]	102	204	102	204
Nominal Energy [Wh]	1305.6 ¹	2611.2 ¹	2611.2 ¹	5222.4 ¹
Recommended Charging Current[A]	50 ^{2,3}	80 ^{2,3}	50 ^{2,3}	100 ^{2,3}
Maximum Charge Current [A]	75 ^{2,3}	100 ^{2,3}	75 ^{2,3}	150 ^{2,3}
Recommended Charging Voltage[V]	14.2	14.2	28.4	28.4
Maximum Charge Voltage [V]	14.6	14.6	29.2	29.2
Recommended Discharge Current [A]	50 ^{2,3}	80 ^{2,3}	50 ^{2,3}	100 ^{2,3}
Maximum Discharge Current [A]	75 ^{2,3}	100 ^{2,3}	75 ^{2,3}	150 ^{2,3}
Discharge Cut-off Voltage [V]	11.1±0.2	11.1±0.2	22.4±0.2	22.4±0.2
BATTERY/CELL				
Cycle Life	8000 ^{2,3,4,5,6}			
Mass Energy Density [Wh/Kg]	165			
Volumetric Energy Density [Wh/L]	350			
Internal Resistance [mΩ]	0.27-0.40 ⁷			
SAFETY AND STANDARDS				
Overcharge Protection	Yes			
Overdischarge Protection	Yes			
Overcurrent Protection	Yes			
Short Circuit Protection	Yes			
Overtemperature Protection	Yes			
Temperature Sensor	Yes			
Adjustable Charge / Discharge Current	Yes			
Cell Type	LFP Prismatic			
Safety Standards	IEC 61960 / 62133-2 / RoHS			
ENVIRONMENTAL CONDITIONS				
Charging Temperature [°C]	0 ~ +60			
Discharge Temperature [°C]	-20 ~ +60			
Storage Temperature [°C]	0 ~ +35			
Humidity (Non-Condensing) [%]	Max. 85%			
Protection Class	IP20-IP65			
Design Life [Year]	>15			
Warranty [Year]	5			
ADDITIONAL INFORMATION				
Dimensions (WxDxH) [mm]	382.6x210.8x205.3	530x357.5x197	530x358x198.8	466.5x626.5x198.5
Weight [kg]	14.50±0.2	27.75±0.2	27.75±0.2	47.70±0.2
Battery Connector	IP67 Protected Positive (+) and Negative (-) Pole Connector			
Serial Connection	No			
Parallel Connection	Yes (Max. 16 pcs)			
Communication	Not Available		CAN / RS485 / Bluetooth	
Display	Not Available		LCD	
Casing Material	Metal Case			
Battery Front View				
Battery Back View				

¹ Usable Energy

² 0.5C

³ 25°C ± 2°

⁴ 50% SOC (State Of Charge)

⁵ 75% D.O.D (Depth Of Discharge)

⁶ 80% EOL (End Of Life)

⁷ 17% ± 3% SOC (State Of Charge)

* TommaTech GmbH reserves the right to change the specification of product without prior notice.

**For modular lithium battery, the base accessory is available separately upon request.

TOMMATECH LFP LITHIUM BATTERY

RACK / MODULAR SERIES



- BTR-P-51.2V-102Ah
- BTR-P-51.2V-102Ah-R

LFP Lithium Battery

TommaTech new generation low voltage lithium batteries offer unique solutions for energy storage. With a long life of up to 8000 cycles, high energy density, high quality and performance, TommaTech lithium batteries stand out with their functional and eco-friendly structure.

TommaTech Lithium Batteries are designed with heat-resistant and high performance LiFePO_4 battery technology. At the same time, lithium batteries equipped with temperature sensors are presented to users with a durable metal case. BMS (Battery Management System) with balancing function is used in TommaTech Lithium Batteries designed with the concept of safety and quality. Batteries with Al-Cu alloy conductive busbars allow up to 16 parallel connections without loss of performance. In this way, energy storage capacity of up to 80kWh can be achieved in a single system.







Product Package Contents

- User Manual
- Battery to battery power cable
- Battery to battery communication cable
- Battery to inverter communication cable
- Grounding cable
- Great performance based on the latest generation of LiFePO_4 technology
- Effective usage structure with active balancing BMS technology
- Long lifespan up to 8000 cycles
- Maximum 0.5C Charge / Discharge
- Aesthetic, compact and durable metal cabinet design
- Different product options according to needs
- Temperature sensor and heat-resistant bracket
- IP20 - IP65 compatible metal cabinet and connector components
- LFP Lithium Batteries allow up to a maximum of 16 parallel connections without loss of performance.

TOMMATECH LFP LITHIUM BATTERY

RACK / MODULAR SERIES

TECHNICAL SPECIFICATIONS	BTR-P-51.2V-102Ah	BTR-P-51.2V-102Ah-R
ELECTRICAL SPECIFICATIONS		
Nominal Voltage [V]	51.2	
Nominal Capacity [Ah]	102	
Nominal Energy [Wh]	5222.4 ¹	
Recommended Charging Current [A]	50 ^{2,3}	
Maximum Charge Current [A]	75 ^{2,3}	
Recommended Charging Voltage [V]	56.8	
Maximum Charge Voltage [V]	58.4	
Recommended Discharge Current [A]	50 ^{2,3}	
Maximum Discharge Current [A]	75 ^{2,3}	
Discharge Cut-off Voltage [V]	44.8±0.2	
BATTERY/CELL		
Cycle Life	8000 ^{2,3,4,5,6}	
Mass Energy Density [Wh/Kg]	165	
Volumetric Energy Density [Wh/L]	350	
Internal Resistance [mΩ]	0.27-0.40 ⁷	
SAFETY AND STANDARDS		
Overcharge Protection	Yes	
Overdischarge Protection	Yes	
Overcurrent Protection	Yes	
Short Circuit Protection	Yes	
Overtemperature Protection	Yes	
Temperature Sensor	Yes	
Adjustable Charge / Discharge Current	Yes	
Cell Type	LFP Prismatic	
Safety Standards	IEC 61960 / 62133-2 / RoHS	
ENVIRONMENTAL CONDITIONS		
Charging Temperature [°C]	0 ~ +60	
Discharge Temperature [°C]	-20 ~ +60	
Storage Temperature [°C]	0 ~ +35	
Humidity (Non-Condensing) [%]	Max. 85%	
Protection Class	IP20-IP65	
Design Life [Year]	>15	
Warranty [Year]	5	
ADDITIONAL INFORMATION		
Dimensions (WxDxH) [mm]	628x468.5x198.5	482x664.5x174.2
Weight [kg]	47.70±0.2	53.35±0.2
Battery Connector	IP67 Protected Positive (+) and Negative (-) Pole Connector	
Serial Connection	No	
Parallel Connection	Yes (Max. 16 pcs)	
Communication	CAN / RS485 / Bluetooth	
Display	LCD	
Casing Material	Metal Case	
Battery Front View		
Battery Back View		

¹) Usable Energy

²) 0.5C

³) 25°C ± 2°

⁴) 50% SOC (State Of Charge)

⁵) 75% D.O.D (Depth Of Discharge)

⁶) 80% EOL (End Of Life)

⁷) 17% ± 3% SOC (State Of Charge)

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**For modular lithium battery, the base accessory is available separately upon request.

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Explore the world
powered by **sun**



5 Ws and H with TommaTech Flexible Panels

WHAT IS A FLEXIBLE PANEL?

Compared to standard solar panels, it is an ultra-light, thin, high-performance solar panel with the ability to flex according to the design. The New Generation Flexible Panel, which contains ETFE (Ethylene Tetra Fluoro Ethylene) polymer with high light transmittance, durable fiberglass and high efficiency IBC solar cell in its structure, is produced at international quality standards with 7-layer advanced lamination technology.

HOW DOES THE FLEXIBLE PANEL WORK?

Flexible panels use an active layer that interacts with sunlight. Sunlight is converted into electrical energy in the semiconductor materials of the active layer. This energy is converted into usable electrical energy through a circuit to which the flexible solar panel is connected.

WHY FLEXIBLE PANEL?

These products are much lighter than standard solar panels, easy to apply and provide advantages of use since they can stretch up to a certain angle. IBC Solar cells preferred in flexible panels are a cell type built on a copper base. When flexible panels are bent or left in a humid environment, they are more resistant to power losses due to breakage and corrosion than conventional solar panels. Flexible panels are one of the most important energy solutions for users thanks to the Bypass diodes and efficient cell architecture in low radiation and shade conditions.

WHERE TO USE FLEXIBLE PANEL?

- **Boats, Vehicles and Camping Equipment:** Flexible solar panels can be used as an energy source in boats, electric vehicles or caravans. They are also an ideal solution for powering devices used for outdoor activities such as camping equipment.
- **Portable Electronic Devices:** Flexible solar panels can be integrated into chargers used in portable electronic devices such as cell phones, tablets, laptops, etc. This allows users to harness solar energy on the go.
- **Wearable Technologies:** Flexible solar panels can be used to power wearable devices.
- **Building Integration:** Flexible solar panels can be integrated into building elements such as roofs, cladding or windows of buildings. In this way, buildings can generate their own energy using solar energy.

WHEN TO USE THEM?

Wherever there is sun and daylight.

WHO USES IT?

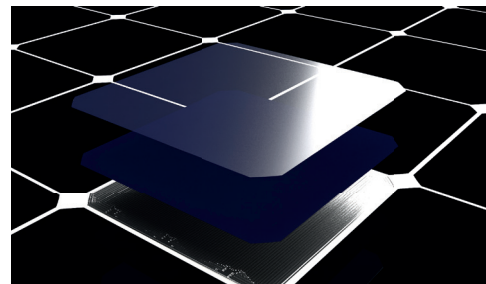
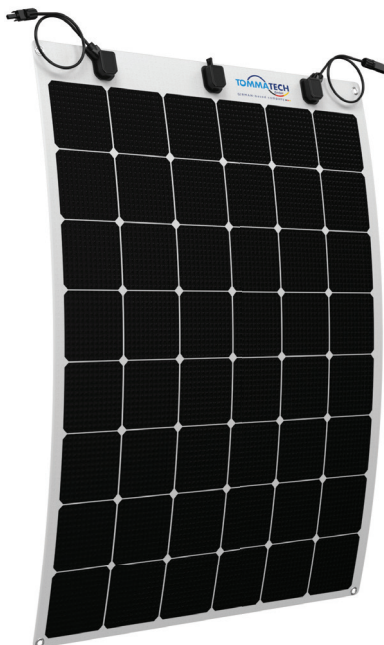
Flexible solar panels are often preferred by boat and caravan dwellers, campers and people looking for an off-grid lifestyle.

IBC CELL TECHNOLOGY (IBC: Interdigitated Back Contact)

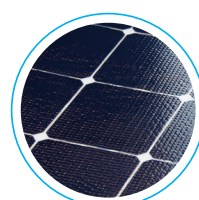
- IBC solar cell (Interdigitated Back Contact) is one of the configurations of Back Contact Solar Cells.
- Interdigitated Back Contact solar cells can achieve higher efficiency by moving all front contacts to the back of the cell.
- Higher potential efficiency can be achieved due to reduced shading at the front of the cell.

ETFE TECHNOLOGY

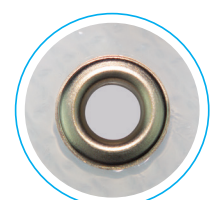
- ETFE (EthylenTetraFluoroEthylene) is a fluoro polymer material.
- It was developed for the aircraft industry, but due to its light transmittance and lightness, it has become a product used in today's architecture.
- ETFE material is very thin and light. It weighs approximately 1% of glass and has more light transmittance.
- With its self-cleaning feature, its visibility and ease of application are at the forefront.



**IP68
 Junction Box**



**Prism
 Surface Design**

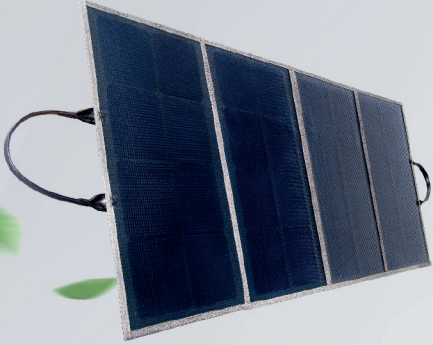


**Stainless
 Eyelet**

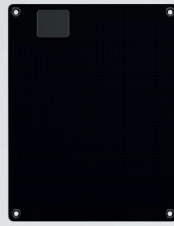
ADVANTAGES OF FLEXIBLE PANEL

- TommaTech flexible panels are manufactured in Türkiye.
- **Light weight:** Flexing up to a maximum of 30 degrees and being lightweight, they fit perfectly on any surface. This allows the panels to be installed on different surfaces, such as curved or flexible. Compared to traditional panels, it provides greater design flexibility.
- **Durability:** The combination of ETFE and fiberglass sheet makes the panel much more durable. IBC Solar cells, which are preferred in flexible panels, are a cell type built on a copper base. It has high light transmittance in its structure. TommaTech Flexible Panels with ETFE polymer, durable fiberglass and high efficiency IBC Solar Cells are more resistant to breakage and power loss due to corrosion than conventional solar panels when bent or left in a humid environment. The IP68 junction box provides a wide range of uses while providing water resistance.
- **Efficiency:** While providing maximum light absorption thanks to the prism surface, TommaTech Flexible Panels are one of the most important energy solutions for users in low irradiance and shadow conditions thanks to the Bypass diodes and efficient cell architecture.
- **Ease of Installation:** Thanks to their flexible design, they can easily fit on the surfaces on the boat, on the roof of the caravan or on the tent without any additional equipment, and thanks to the stainless bird eye on the edges, they can be attached to the surface with rope instead of screws or mounted with industrial silicone adhesive.
- **Special Design:** Available in white and black colors, the series can be produced in different power, size and shape options according to your needs.

Our Flexible Panel *Products*



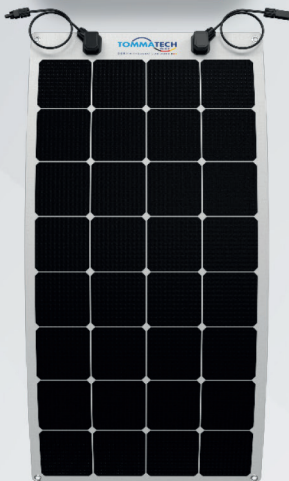
FOLDABLE SOLAR PANEL
110Wp



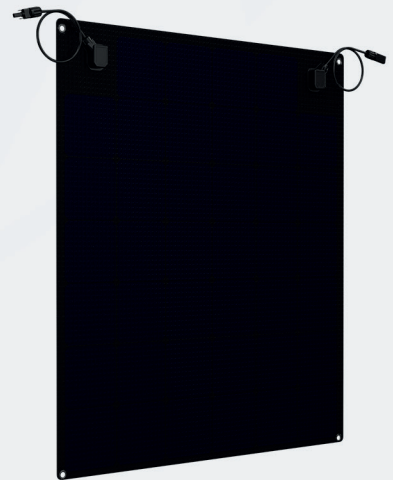
MOBILE SOLAR CHARGING PANEL
15 Wp



FOLDABLE SOLAR CHARGING PANEL
25Wp



FLEXIBLE SOLAR PANELS
110Wp, 170Wp



CUSTOM-MADE FLEXIBLE SOLAR PANELS

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With the energy you get from the **sun**
electricity is **everywhere you go**



TOMMATECH FLEXIBLE SOLAR PANELS

FLEXIBLE PANELS



- TT-FLEX-110 110Wp
- TT-FLEX-110-FB 110Wp
- TT-FLEX-170 170Wp
- TT-FLEX-170-FB 170Wp

Flexible Solar Panels

TommaTech New Generation Flexible Panel, which has high light transmittance ETFE polymer, durable fiberglass and high efficiency IBC solar cell in its structure, is produced in international quality standards with 7-layer advanced lamination technology. The combination of ETFE and fiberglass sheet makes the panel much more durable. It flexes up to a maximum of 30 degrees and is lightweight, making it a perfect fit for any surface. Available in 110Wp and 170Wp power options, TommaTech Flexible Panel Series has the advantage of being used in many application areas such as boats, caravans, roofs and many similar applications. Available in white and black color options, the series has the option of production in different power and size options according to your needs.



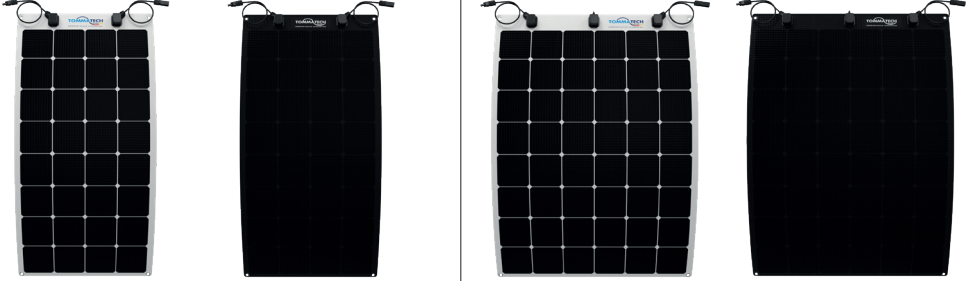
Product Package Contents

- User Manual

- IBC Solar cells, which are preferred in flexible panels, are a cell type built on a copper base. When bent or left in a humid environment.
- TommaTech Flexible Panels are more resistant to power losses due to breakage and corrosion than conventional solar panels.
- TommaTech Flexible Panels are one of the most important energy solutions for users with the Bypass diodes and efficient cell architecture in low radiation and shade conditions.

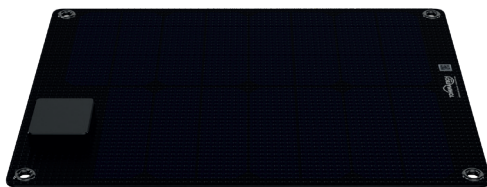
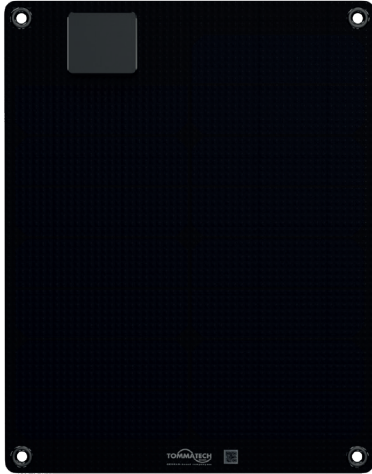
TOMMATECH FLEXIBLE SOLAR PANELS

FLEXIBLE PANELS

TECHNICAL SPECIFICATIONS	TT-FLEX-110 110Wp	TT-FLEX-170 170Wp
MODEL TYPE		
Peak Power (Pmax) [Wp]	110	170
Module Efficiency (%)	17.5	18.5
Power Tolerance [W]	0~+5	
Maximum Power Voltage(Vmp) [V]	18.84	29.10
Maximum Power Current (Imp) [A]	5.84	5.84
Open Circuit Voltage (V) [V] oc	22.80	34.60
Short Circuit Current (I) [A] sc	6.15	6.30
Temp. Coeff. of (Pmax)	-0.29%/°C	
Temp. Coeff. of (Voc)	-55.68mV/°C	-83.70mV/°C
Temp. Coeff. of (Isc)	2.9mA/°C	
Dimensions (mm)	1134x555x3	1134x811x3
Weight (kg)	2.3	3.2
Maximum System Voltage [VDC]	1500	
Maximum Series Fuse Rating [A]	15	
Protection Class	IP68	
Number of ByPass Diodes	2	3
Panel View	 <p> <input checked="" type="checkbox"/> TT-FLEX-110 <input checked="" type="checkbox"/> TT-FLEX-110-FB <input checked="" type="checkbox"/> TT-FLEX-170 <input checked="" type="checkbox"/> TT-FLEX-170-FB </p>	

TOMMATECH MOBILE SOLAR CHARGING PANEL

15W MOBILE SOLAR CHARGING PANEL

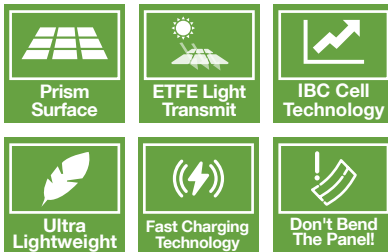


■ TT-FSC-15

15Wp Mobile Solar Charging Panel

TommaTech Mobile Solar Charging panels provide power to portable chargers such as powerbanks, smart phones, tablets or other USB devices directly from the sun, offering a wide range of applications.

- Maximum light absorption through prism surface
- Higher light transmittance, corrosion resistance, operating temperature range
- Flexible, durable and high efficient cell with back contact connection
- Can be carried wherever you go with its bag size and lightweight design
- Fast charging up to 3 amps with QC 3.0 technology
- Bending the panel causes damage to the cells inside and energy loss



Product Package Contents

- User Manual



Charging Devices While Sunbathing



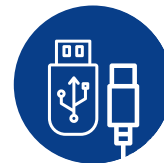
Charging Powerbanks While Walking



Charging On the Stroller



For USB Fan Charging



USB and Type-C ports



For Ipad Charging

TOMMATECH MOBILE SOLAR CHARGING PANEL

15W MOBILE SOLAR CHARGING PANEL

TECHNICAL SPECIFICATIONS	TT-FSC-15	
MODEL TYPE		
Peak Power (Pmax) [Wp]	15	
Maximum Power Voltage (Vmp)[V]	9.31	
Maximum Power Current (Imp)[A]	1.63	
Open Circuit Voltage (Voc)[V]	10.81	
Short Circuit Current (Isc)[A]	1.72	
Temp. Coeff. of Pmax	-0.29%/°C	
Temp. Coeff. of Voc	-26.1mV/°C	
Temp. Coeff. of Isc	2.90mA/°C	
Dimensions [mm]	269x344x3	
Weight [kg]		
Output Ports	USB-A / TYPE-C	
USB Output Voltage	5V/ 9V/ 12V	
Maximum Charging Current [A]	3	
Panel View	Front View	Side View
		



TOMMATECH FOLDABLE SOLAR CHARGING PANEL

25W FOLDABLE SOLAR CHARGING PANEL

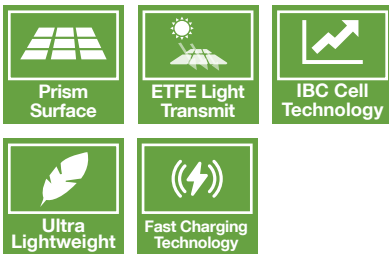


■ TT-FSC-25

25Wp Mobile Solar Charging Panel

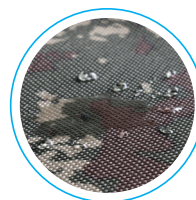
TommaTech Easy Life Series Foldable Solar Charging Panel provide power to portable chargers such as powerbanks, smart phones, tablets or other USB devices directly from the sun, offering a wide range of applications.

- Maximum light absorption through prism surface
- Higher light transmittance, corrosion resistance, operating temperature range
- Flexible, durable and high efficient cell with back contact connection
- Compact design with easy to carry size and weight
- Fast charging up to 3 amps with QC 3.0 technology



Product Package Contents

- User Manual



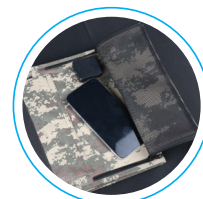
IPX4 Protection



Hanger and carabiner





Charging Multiple Devices

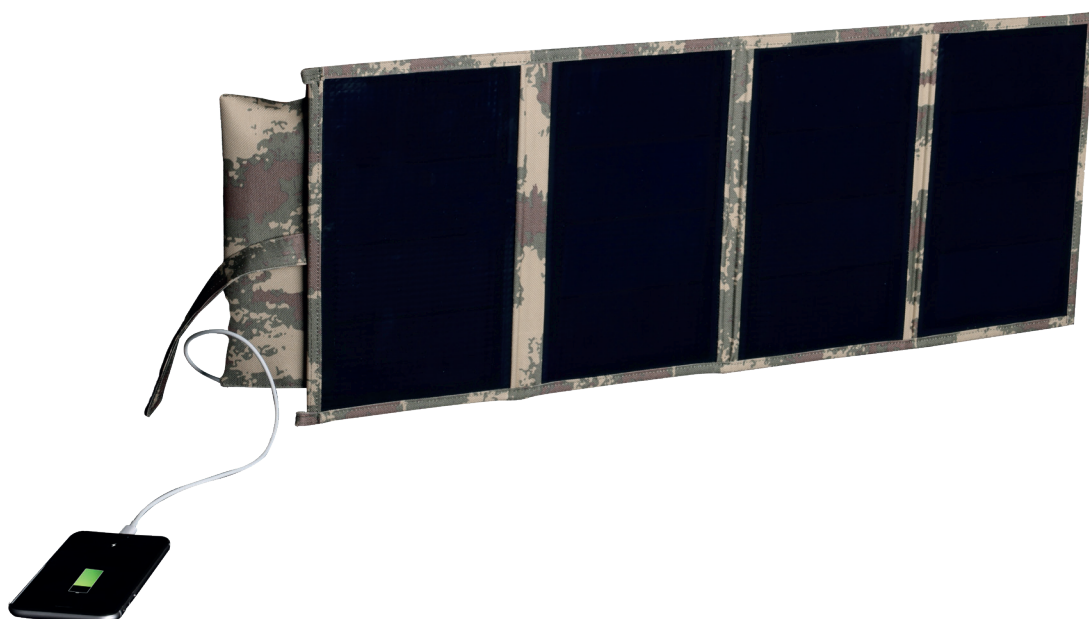


Zippered Pocket

TOMMATECH FOLDABLE SOLAR CHARGING PANEL

25W FOLDABLE SOLAR CHARGING PANEL

TECHNICAL SPECIFICATIONS	TT-FLEX-FBAG-110 110Wp	
MODEL TYPE		
Peak Power (Pmax) [Wp]	25 Wp	
Maximum Power Voltage (Vmp)[V]	9.90	
Maximum Power Current (Imp)[A]	2.55	
Open Circuit Voltage (Voc)[V]	11.41	
Short Circuit Current (Isc)[A]	2.70	
Temp. Coeff. of Pmax	-0.29%/°C	
Temp. Coeff. of Voc	-0.29%/°C	
Temp. Coeff. of Isc	2.9mA/°C	
Dimensions [mm]	698x268x4 / 175x268x40	
Weight [kg]	0.8	
Output Ports	USB-A / TYPE-C	
USB Output Voltage	QC 3.0 Quick Charge 5V-9V-12V	
Maximum Charging Current [A]	3	
Exterior of the Product	Fabric	
Panel View	Front View	Side View
		

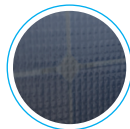


TOMMATECH FOLDABLE SOLAR CHARGING PANEL

110W FOLDABLE SOLAR CHARGING PANEL



Solar Connector



Prism Surface



USB Fast Charging Output



Prism Surface



ETFE Light Transmit



IBC Cell Technology



Ultra Lightweight



Easy to use



Increaseable Capacity

Product Package Contents

- User Manual

■ TT-FLEX-FBAG-110 110Wp



110Wp Foldable Solar Panels

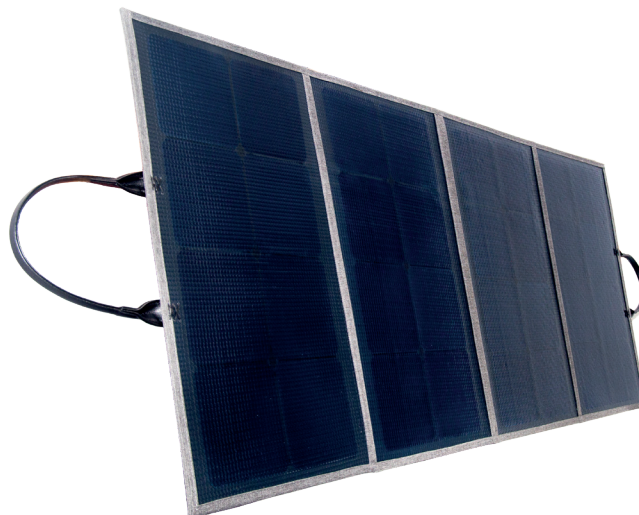
Easy to install, to carry and to use, the TommaTech foldable solar panel is a powerful companion ready to take you on your next adventure. Designed to withstand harsh operating conditions, the high-performance solar panel offers a practical and reliable solution for emergencies. TommaTech foldable solar panel, which has high light transmittance ETFE polymer, durable fiberglass sheet and high efficiency IBC solar cell in its structure, is produced in international quality standards with 7-layer high lamination technology. With TommaTech foldable solar panels, you can charge your phone or tablet directly with USB power output, while at the same time you can get up to 110W instant power output with solar connectors. It is also possible to increase capacity by connecting multiple products together. Models can be customized for your different needs. The holders allows you to adjust the panel to the optimum angle for maximum performance. You can make adjustments as the position of the sun changes.

- Maximum light absorption through prism surface
- Flexible, durable and high efficient cell with back contact connection
- Higher light transmittance, corrosion resistance, operating temperature range
- Ultra thin and durable design
- Easy to use, practical design
- Increaseable power by connecting two or more products together

TOMMATECH FOLDABLE SOLAR CHARGING PANEL

110W FOLDABLE SOLAR CHARGING PANEL

TECHNICAL SPECIFICATIONS	TT-FLEX-FBAG-110 110Wp	
MODEL TYPE		
Peak Power (Pmax)	110 Wp	
Power Tolerance	0~+5W	
Maximum Power Voltage (Vmp)	18.84	
Maximum Power Current (Imp)	5.84	
Open Circuit Voltage (Voc)	22.80	
Short Circuit Current (Isc)	6.15	
Temp. Coeff. of Pmax	-0.29%/°C	
Temp. Coeff. of Voc	-0.29%/°C	
Temp. Coeff. of Isc	2.9mA/°C	
Dimensions (Opened/Closed)(mm)	1265x550x6 / 550x315x24	
Weight	4	
Maximum System Voltage	1000V DC	
Maximum Series Fuse Rating	15A	
Protection Class	IP68	
Junction Box Cable Length (mm)	600	
Connector	MC4	
USB Output	QC 3.0 Quick Charge 5V-9V-12V	
Exterior of the Product	Fabric	
Panel View	Front View	Side View
		









GERMAN-based company ●●●

www.tommatech.de | mail@tommatech.de