




GERMAN-based company ●●●

# AGRICULTURAL IRRIGATION INVERTER

## Catalogue





 Garching - Munich Manufacturing Facility / Germany



 Antalya Manufacturing Facility / Türkiye

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In an increasingly complex world, we continuously adapt to changes and actively encourage all our partners to embrace our long-term goals and values through goal-oriented communication and a deep mutual understanding of our mission. In this way, we aim to provide a valuable contribution for future generations.

# T e c h n o l o g y

## Vision:

Our vision is to be a leader in the development of advanced solar energy technologies that maximize energy efficiency, protect the ecological balance, restore harmony between humans and nature, and accelerate the global transition to renewable energy in order to achieve the set climate goals.

## Mission:

We focus on continuous innovation and research to develop modern solar technology and integrate it efficiently into smart home systems, enabling our customers to benefit from connected and sustainable energy use.

## Today:

Many customers are already benefiting from our modern installations, which we have seamlessly integrated into their homes. This optimizes energy consumption, allowing customers to save money immediately and reduce their carbon footprint.

# O p t i m i z a t i o n

“Through intelligent optimization solutions, we achieve the most efficient use of solar energy worldwide, actively supporting the achievement of climate neutrality.”

“We are committed to developing and implementing advanced automation and control technologies to optimize energy consumption in households and businesses while significantly reducing operating costs.”

Our customers' current energy optimization systems have already achieved significant improvements in emissions.

# M a n u f a c t u r i n g

We aim to be a leading manufacturer of solar technologies, setting industry standards for quality and sustainability.

We are committed to producing high-quality and innovative solar products that meet the needs of the present while addressing future challenges. Through continuous improvements and investments in our production processes, we strive to maximize efficiency and minimize environmental impact.

Our customers are already benefiting from the advanced solar products manufactured in our state-of-the-art facilities. These products are not only efficient and reliable but also leading in terms of sustainability and environmental protection. The continuous optimization of our production processes guarantees products that are both economically and ecologically advantageous.

# M i l e s t o n e s

We are pioneering solar technology that plays a crucial role in contributing to energy independence and climate resilience.

We drive transformative change in the global use of solar energy. By developing technologies that enable significant improvements in performance and ease of use, we are setting new standards.

Customers worldwide are using our technology, and together we are accelerating the transition to renewable energy while achieving both economic and ecological benefits.

# A u t o m a t i o n

To drive the integration of intelligent automation solutions that make the interaction between solar technologies and end users seamless and intuitive.

To develop automation systems that not only operate smoothly but also adapt to consumer needs. These systems aim to optimize energy consumption, enhance operational efficiency, and accelerate the adoption of renewable technologies.

Our customers are enjoying the convenience and efficiency that our intelligent automation solutions bring to their daily lives. These technologies simplify the control of their energy supply, reduce costs, and support the transition to a more environmentally friendly future.



2014



60+



2

## T r a n s p a r e n c y

### Vision:

We aim to create an atmosphere of openness where everyone from our customers to our employees feels secure and well-informed.

### Mission:

Clear information, no secrets that's our motto. Whether it's about the production of our products or how they function, we keep you constantly updated. We believe that well informed people make better decisions.

### Today:

Our customers and partners benefit from our transparent business management. We ensure complete openness at every stage of our processes, from development to product delivery. This practice of open communication allows our stakeholders to make informed decisions and strengthens trust in long-term collaboration with our company.

## E x p e r i e n c e

We want every interaction with our company to be a positive experience for customers and partners. Our products and services should not only be reliable and innovative but also inspire enthusiasm.

Our goal is to provide each customer and partner with a personalized and valuable experience. With our extensive experience in solar technology, we know what works and we use that knowledge to exceed your expectations and make the transition to sustainable energy easier for you.

Our customers benefit directly from our many years of experience in solar technology. We deliver tailored solutions that are reliable and efficient, supporting every step of the journey toward sustainable energy. Our team ensures a seamless experience through professional advice and assistance.

## C o m m i t m e n t

Our vision is to be a leader in the solar industry through our unwavering commitment to quality and sustainability. We strive to improve in every aspect every day from product development to our services.

Our primary goal is to consistently exceed our customers' expectations. We are committed to the highest quality and continuous improvement of our products and services. Our dedication to sustainability and ethical business practices is unwavering and guides all our actions.

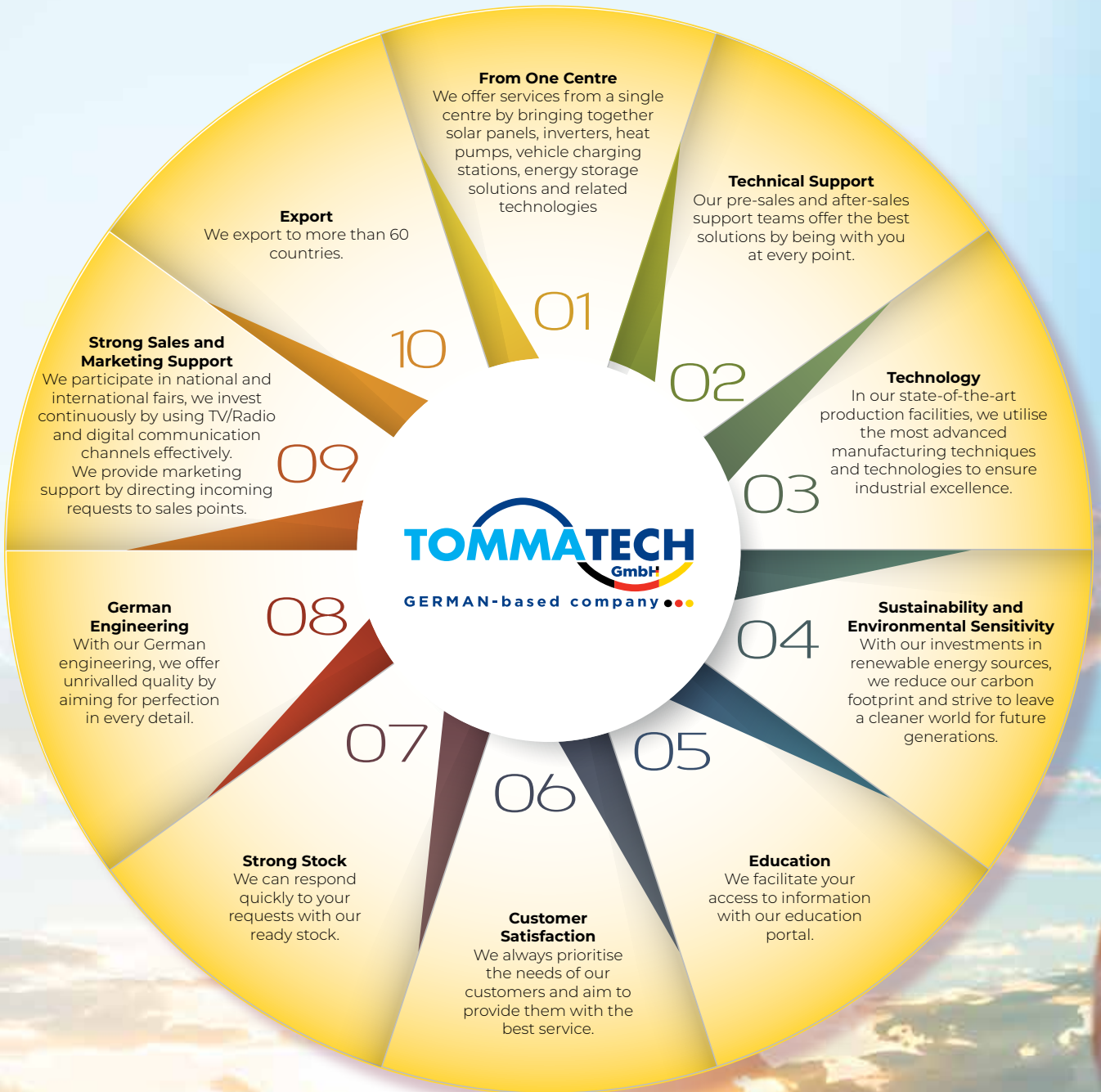
Our customers and partners can rely on our strong commitment. We employ innovative and sustainable technologies to ensure that our solutions are not only efficient but also environmentally friendly. Every project is executed with the highest standards of quality and a focus on long-term customer satisfaction.

## H o m e S o l u t i o n

We aim to transform every home into an eco-friendly energy source. Our vision is to offer advanced solar solutions that are easy to integrate and optimize household energy consumption while contributing to global sustainability.

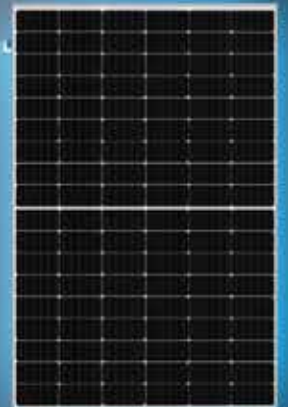
Our goal is to develop customized solar solutions tailored to the specific needs and conditions of each household. We are committed to providing our customers with the best combination of efficiency, ease of use, and economic benefit, making the transition to renewable energy simple and appealing.

Our Home Solution products enable customers to meet their energy needs sustainably while saving costs. Homes equipped with our technology benefit from intelligent energy management and a reduced carbon footprint. Our solutions are not only environmentally friendly but also user-friendly, allowing every household to fully harness the advantages of modern solar technology.



with TommaTech

*You are in control!*



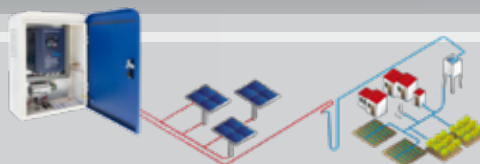
## SINGLE PHASE (MF)

SPI-TT-2.2-MF



## THREE PHASE (TF)

SPI-TT-2.2-TF - SPI-TT-250.0-TF  
SPI-TT-250.0-TF - SPI-TT-650.0-TF  
(SPECIAL Production)





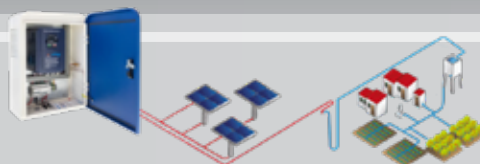
## READY IRRIGATION CABINET

IP55 Protection Class



## ENERGY MANAGEMENT SYSTEM

TommaTech Solar Irrigation  
Portal



## WHAT IS SOLAR PUMP INVERTER?

TommaTech Solar Pump Inverter; It is a special inverter series that converts the DC Voltage from solar energy to AC to operate water pumps operating with 220V/230V Monophase or 380V/400V Three Phase and enables the pump motor to start with the drive circuit inside.

TommaTech Irrigation Inverters are specially produced for solar irrigation systems and have high MPPT voltage.

## HOW DOES THE SOLAR PUMP INVERTER WORK?

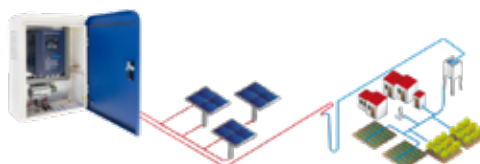
TommaTech Solar Pump Inverters are a special inverter series that converts the DC Voltage from solar energy to AC to operate water pumps operating with 220V/230V Single Phase or 380V/400V Three Phase and enables the pump motor to start with the drive circuit inside. TommaTech irrigation inverters are specially designed for solar irrigation systems and have high MPPT voltage.

The instantaneous power received from the solar panels is converted into the signals required to operate the pump motor through the irrigation inverter and transmitted to the motor. With the drive circuit in the inverter, it changes the rotation moment or the number of revolutions of the pump shaft according to the instantaneous power consumed by the pump and offers low flow water in the morning and evening hours and high flow water at noon.

The water drawn from the deep well or surface water can be used immediately, or if desired, it can be accumulated in a suitable volume tank and used for evening or night irrigation with the AC voltage drawn from the network with the AC input of the inverter.

## SOLAR IRRIGATION INVERTER USAGE AREAS

- Agricultural Irrigation Projects
- Drinking Water Treatment & Discharge
- Pool Water Drainage
- Ornamental Pools and Other Applications



## ADVANTAGES OF SOLAR PUMP INVERTER

Solar energy agricultural irrigation inverters offer a more economical solution by reducing dependence on the electricity grid and fossil fuels with sustainability in agriculture, energy-saving irrigation solutions. Solar energy is a renewable and environmentally friendly energy source, while saving electricity costs. Solar-powered irrigation systems reduce the carbon footprint and cause less damage to the environment and provide higher efficiency thanks to the continuous energy source throughout the day.

## WHY SOLAR IRRIGATION INVERTER?

- High-quality components and durable outer casing
- Possibility to connect more panels thanks to high input voltage
- High performance in cloudy weather with advanced MPPT algorithm
- Wide operating temperature range: -40/+70C°
- Irrigation inverter specially produced for irrigation projects



# TOMMATECH IRRIGATION PUMP INVERTER

SPI-TT-2.2-MF

SPI-TT-2.2-TF - SPI-TT-250.0-TF

SPI-TT-250.0-TF - SPI-TT-650.0-TF (SPECIAL Production)



## Product Features



Wide MPPT  
Operating  
Voltage  
Range



DC and AC  
Input Support



1000VDC MPPT  
and 900VDC MPPT  
Input Voltage  
Options



High  
Efficiency



2.2 kW - 650 kW  
Power Options



Operation in  
Wide  
Temperature  
Range



Uninterrupted  
Irrigation with  
High MPPT



High Quality  
Component



Case Type:  
15kW Plastic  
ABS Metal  
Case



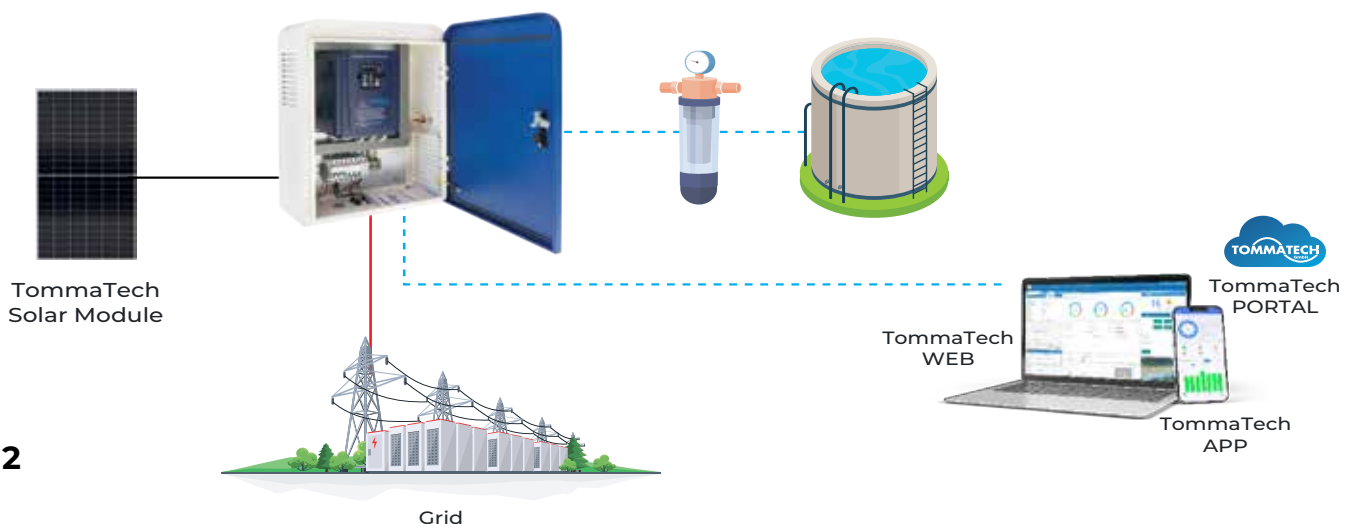
IP20  
Protection Class



Remote  
monitoring

## Connection Diagram

TommaTech  
Irrigation Inverter

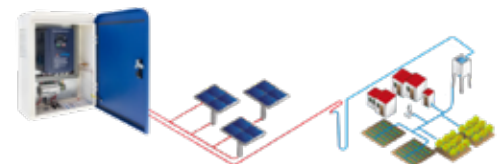


MODEL	230V Solar Pump Inverter	400V Solar Pump Inverter
Recommended DC Input Voltage Range	200V-400V	300V-750V
AC Input Voltage	220V(-15%) 240V(+10%)	380V(-15%) 440V(+10%)
Maximum DC Input Voltage	450V	900V
Start Voltage	200V	300V
Lowest Operating Voltage	150V	250V
Recommended MPPT Voltage	330V	550V



MODEL NO	Input VOLTAGE (V)	POWER OF REMEMBRANCE (KW)	NOMINAL INPUT CURRENT (A)	NOMINAL OUTPUT CURRENT (A)	COMPATIBLE ENGINE (KW)
SPI-TT-1.5-MF	1PH 230V	1.5	15.7	10.2	1
SPI-TT-2.2-MF		2.2	24	14	1.5
SPI-TT-1.5-TF		1.5	5	4.2	1.1
SPI-TT-2.2-TF	3PH 400V	2.2	5.8	5.5	1.5
SPI-TT-4.0-TF		4	13.5	9.5	2.2
SPI-TT-5.5-TF		5.5	19.5	14	4
SPI-TT-7.5-TF		7.5	25	18.5	5.5
SPI-TT-11.0-TF		11	32	25	7.5
SPI-TT-15.0-TF		15	40	32	11
SPI-TT-18.5-TF		18.5	47	38	15
SPI-TT-22.0-TF		22	51	45	18.5
SPI-TT-30.0-TF		30	70	60	22
SPI-TT-37.0-TF		37	80	75	30
SPI-TT-45.0-TF		45	94	92	37
SPI-TT-55.0-TF		55	128	115	45
SPI-TT-75.0-TF		75	160	150	55
SPI-TT-90.0-TF		90	190	180	75
SPI-TT-110.0-TF		110	225	215	90
SPI-TT-132.0-TF		132	270	255	110
SPI-TT-160.0-TF		160	290	305	132
SPI-TT-185.0-TF	185	330	340	160	
SPI-TT-250.0-TF	250	460	480	220	

\* Tommatech GmbH reserves the right to change the specifications of the products without prior notice  
 \*\* Power up to 600kW available on request.



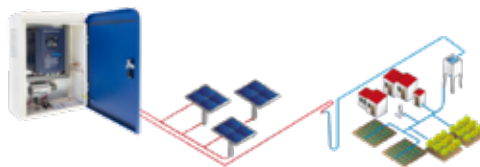


1.5KW-15KW PLASTIC BOX

18.5KW-132KW METAL BOX

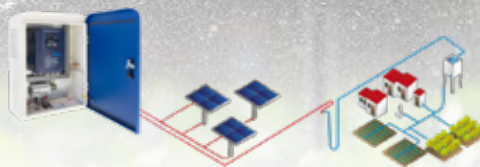
MODEL NO	A (mm)	B (mm)	H (mm)	W (mm)	D (mm)	ASSEMBLY HOLE (D)
SPI-TT-1.5-MF	110	170	180	120	154	4
SPI-TT-2.2-MF						
SPI-TT-1.5-TF						
SPI-TT-2.2-TF						
SPI-TT-4.0-TF	148	240	250	161	184	5
SPI-TT-5.5-TF						
SPI-TT-7.5-TF						
SPI-TT-11.0-TF	205	305	320	220	190	6
SPI-TT-15.0-TF						
SPI-TT-18.5-TF						
SPI-TT-22.0-TF	220	455	475	295	245	6
SPI-TT-30.0-TF						
SPI-TT-37.0-TF						
SPI-TT-45.0-TF						
SPI-TT-55.0-TF	230	560	580	375	265	6
SPI-TT-75.0-TF						
SPI-TT-90.0-TF						
SPI-TT-110.0-TF						
SPI-TT-132.0-TF	320	730	755	460	330	6
SPI-TT-160.0-TF						
SPI-TT-185.0-TF						
SPI-TT-250.0-TF	550	-	1200	860	385	vertical base
	750	-	1400	1020	405	vertical base

\* TommaTech GmbH ürünlerin özelliklerini önceden haber vermeksizin değiştirme hakkını saklı tutar.





- — **REMOTE MONITORING MODULE**
- — **WATER LEVEL CONTROL**
- — **DC AND AC POWER SUPPLY**
- — **1000V DC INPUT VOLTAGE**
- — **CONTINUOUS IRRIGATION WITH HIGH MPPT**



# TOMMATECH IRRIGATION INVERTER READY IRRIGATION BOX

IP55 Protection Class

## Ready Irrigation Box

The Ready Irrigation Box simplifies the electrical management of irrigation systems and optimises the performance of the system. This situation ensures that irrigation processes in agricultural areas are carried out more efficiently, safely and regularly.

Irrigation panels can increase agricultural productivity by saving water and reducing energy costs.

It is dust and water resistant with IP55 protection class.

Control with circuit breaker: Ready-made irrigation boxes have a switch that switches the electric current on and off. It controls the switching on and off of the irrigation inverter.

Protection and Safety: It protects the irrigation inverter from external influences and various malfunctions. This ensures safe operation and long life of the system.

Power Supply and Distribution Units: Regulates the electric current and manages the energy flow between the pump and the inverter.



## Product Specifications



**High Quality  
Component**



**Cabinet Type  
Metal DKP  
Case**



**IP55  
Protection Class**



**High  
Efficiency**



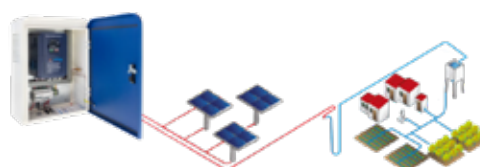
**2.2 kW - 650 kW  
Power Options**



**Operation in  
Wide  
Temperature  
Range**



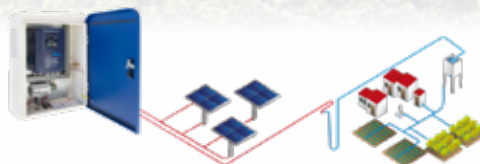
**DC and AC  
Input Support**





PRODUCT CODE	COMPATIBLE INVERTERS	PANEL DIMENSIONS (WIDTH-LENGTH-DEPTH)	MOTOR - MAINS RECORD NUMBER	CONNECTOR HOLE NUMBER	EMPTY PANEL WEIGHT
TS-PANO-TPA-00,75-5,5-2D	SPI-TT-2.2 MF SPI-TT-2.2 TF SPI-TT-4.0 TF SPI-TT-5.5TF	400x500x220	2 HOLE	2 HOLE	10 KG
TS-PANO-TPB-07,5-11-4D	SPI-TT-7.5 TF SPI-TT-11.0 TF	500x700x220	2 HOLE	4 HOLE	16 KG
TS-PANO-TPB-15-6D	SPI-TT-15.0 TF	600x850x270	2 HOLE	6 HOLE	22 KG
TS-PANO-TPC-18,5-8D	SPI-TT-18.5 TF			8 HOLE	
TS-PANO-TPC-22-10D	SPI-TT-22.0 TF			10 HOLE	
TS-PANO-TPC-30-12D	SPI-TT-30.0 TF			12 HOLE	
TS-PANO-TPD-37-16D	SPI-TT-37.0 TF	700x1000x310+200	2 HOLE	16 HOLE	28 KG
TS-PANO-TPD-45-20D	SPI-TT-45.0 TF			20 HOLE	
TS-PANO-TPD-55-24D	SPI-TT-55.0 TF			24 HOLE	
TS-PANO-TPE-75-32D	SPI-TT-75.0 TF	700x1000x310+200	2 HOLE	32 HOLE	1000 KG
TS-PANO-TPE-90-40D	SPI-TT-90.0 TF			40 HOLE	
TS-PANO-TPE-110-48D	SPI-TT-110.0 TF			48 HOLE	
TS-PANO-TPE-132-54D	SPI-TT-132.0 TF			54 HOLE	
TS-PANO-TPF-160-50D	SPI-TT-160.0 TF	1150x1800x480+200	3 HOLE	54 HOLE	200 KG

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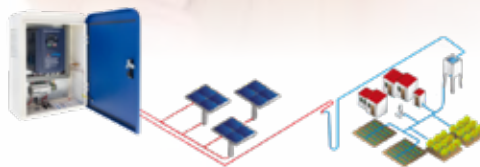


**PORTAL**

*experience the*  
**COMFORT OF THE FUTURE**



ANDROID APP ON  
Google play  
Download on the  
App Store



## "One Brand, One Application"

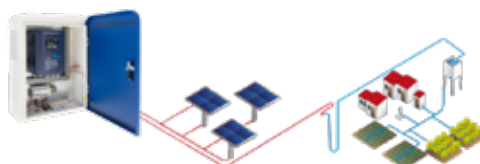
### Easy Use

With TommaTech Portal, you can easily provide remote monitoring and control of all your devices through a single application. You can make many setting changes and remote monitoring from the voltage and current values you receive from the panels to the occupancy rate of your high voltage battery, from the instantaneous power requirement of your home to the instantaneous consumption of the EV Charger, from the operating mode selection of the hybrid inverter to the water temperature change via the heat pump.

### Easy Access

Thanks to various remote monitoring accessories, it offers the option of remote monitoring either wired or wirelessly depending on the installation location.

You can easily log in from anywhere at any time via WEB or APP. By logging in via WEB, you can access the detailed data of your system and create reports on a daily, monthly or annual scale.





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