TOMMATECH GmbH

GERMAN-based company

OFF-GRID INVERTER

Catalog



TT-UM006-005



Garching - Munich Production Center / Germany



Antalya Production Center / Turkey

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TOMMATECH GmbH
GERMAN-based company

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 mutual, in-depth understanding of our mission. In this way, we aim to make a valuable contribution for future generations.

Technology

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.

Optimization

"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

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

Manufacturing

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.

Milestones

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.

Automation

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.

CE ISO SOMPO

TOMMATECH GmbH

GERMAN-based company



2014



60+



2

Transparency

Vision:

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

Experience

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.

Commitment

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.

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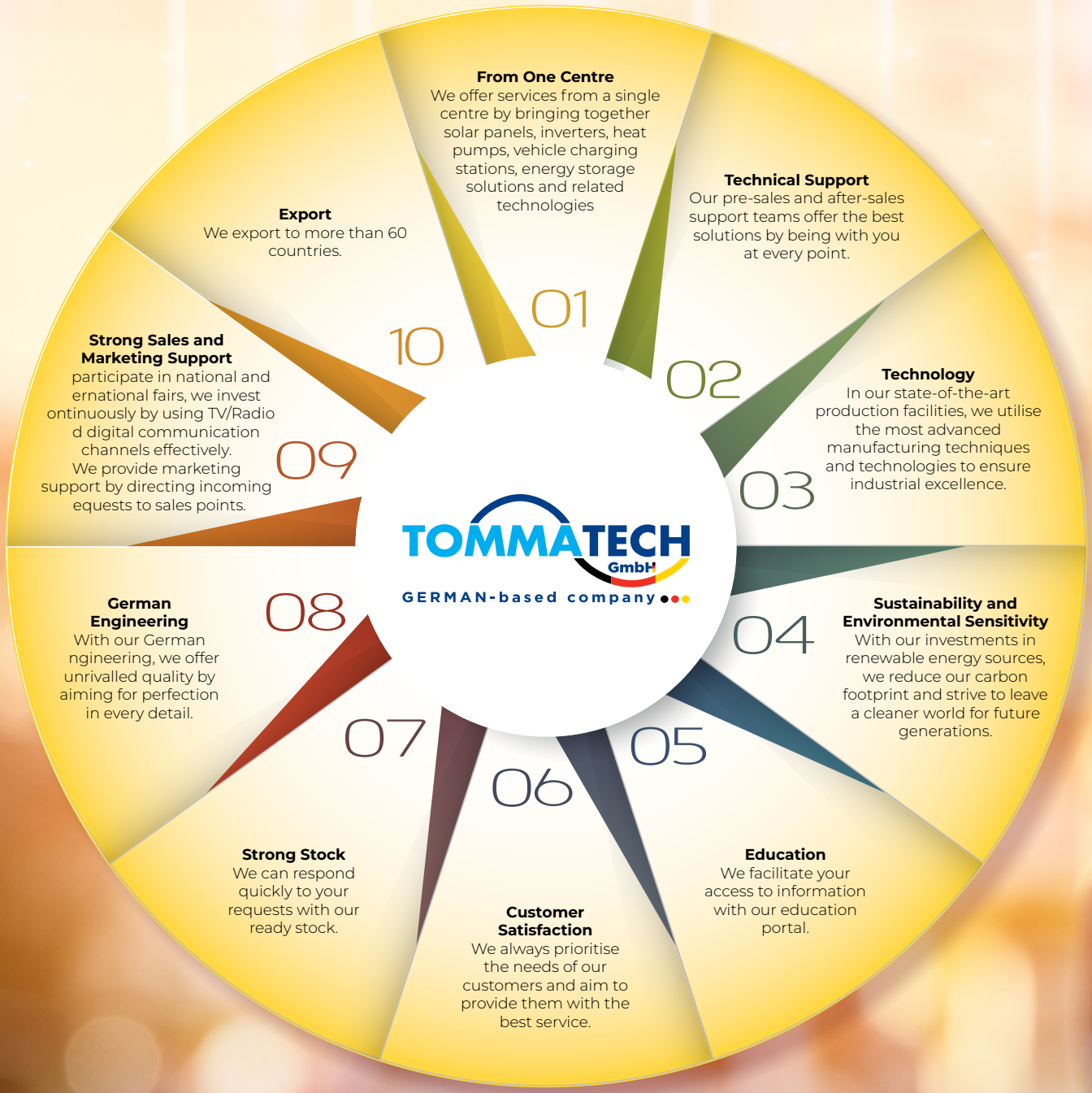
Our customers and partners can rely on our strong commitment. We employ innovative and sustainable technologies to ensure that our solutions are not only efficient but also environmentally friendly. Every project is executed with the highest standards of quality and a focus on long-term customer satisfaction.

Home Solution

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.

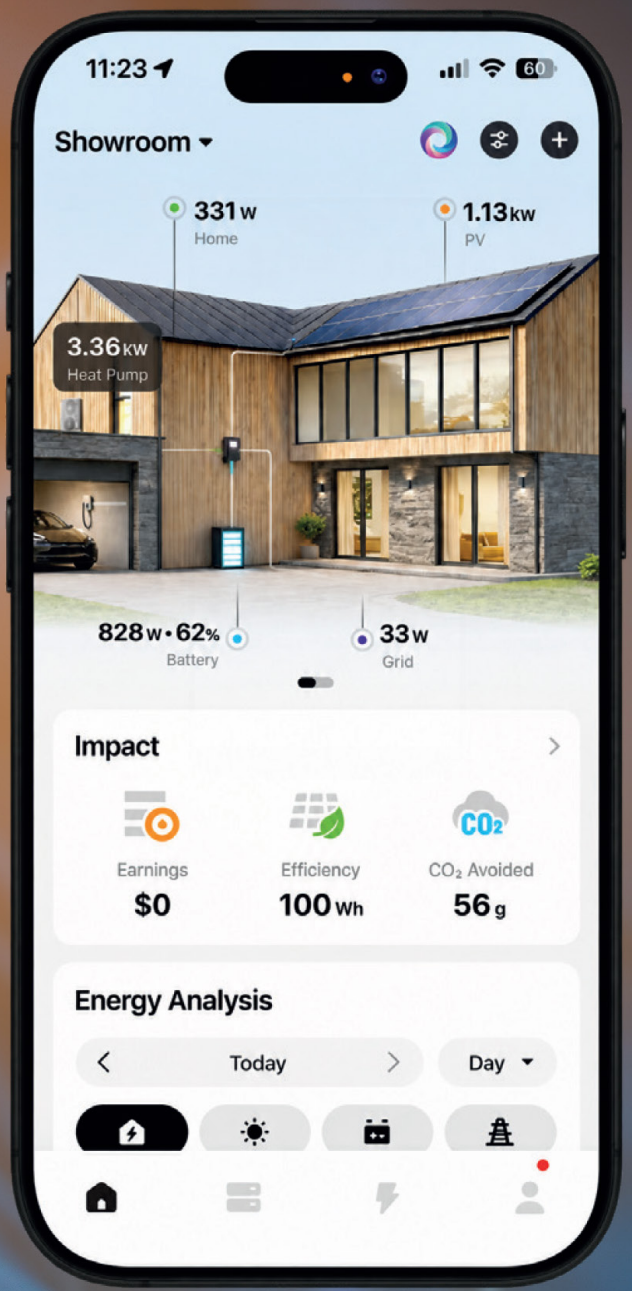


With TommaTech

You are in control!

TOMMATECH GmbH
GERMAN-based company

CLOUD



1 PV Panel

2 BIPV Veranda

3 Carport

7 EV Charging Unit

8 Pool Heat Pump

9 Power Series Heat Pump

CW ALÜMİNYUM
Manufactured with CW Aluminium Expertise

TOMMATECH GmbH
GERMAN-based company

Cloud



"Experience the Comfort of the Future."

With **TommaTech Cloud,**
the control of your home is at your fingertips.

13 Thermal Panel

14 Boiler Tank

15 Circulation Pump

19 Control Panel

20 Alarm Panel

21 Solar Camera

4 İnverter

5 Lithium Battery

6 Smart Meter

10 Fan Coil Heating & Cooling

11 Underfloor Heating

12 Hot Water

TOMMATECH GmbH

GERMAN-based company



16 White Goods

17 Built-in Set

18 Built-in Coffee Machine

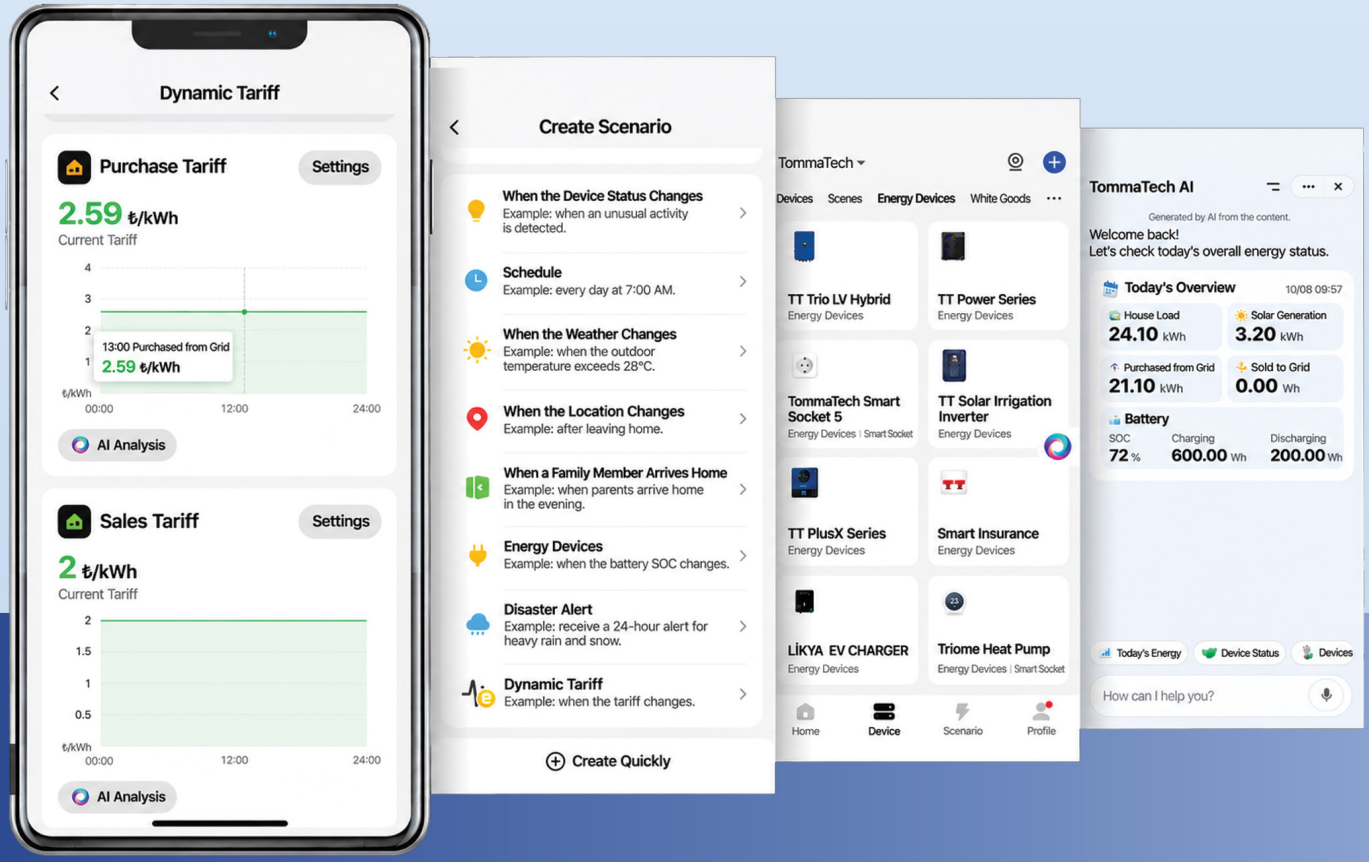
22 Sensors

23 Wi-Fi Socket

24 Hydrogen Systems

TOMMATECH GmbH
GERMAN-based company
CLOUD

Generate Your Home's Energy, Manage Your Comfort One Place.



Scenarion and Automation

Real - Time Monitoring

Remote Access

Artificial Intelligence

Compatible with Voice Assistant

Download on the App Store

Get it on Google Play

“One Brand, One Application”

TommaTech Cloud

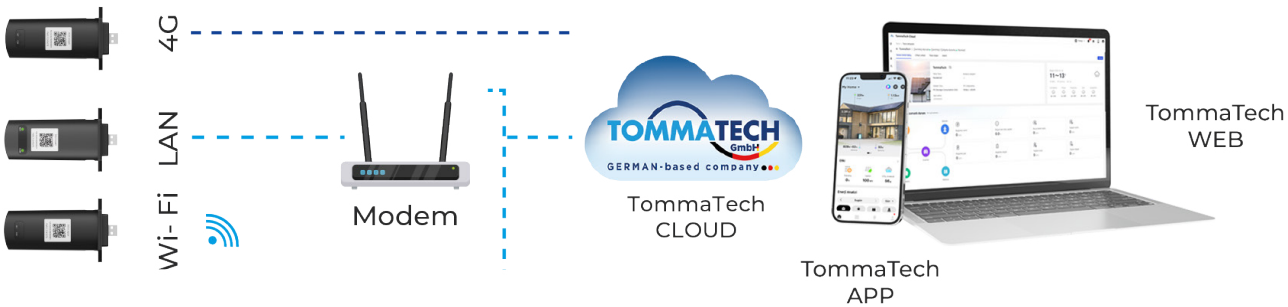
Easy Operation

With TommaTech Cloud, remote monitoring of all your devices via a single application and control can be easily achieved. From the voltage and current values received from the panels to the charge level of your high voltage battery, from the instantaneous power need 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, you can make many setting changes and perform remote monitoring.

Easy Access

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

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



WHAT IS AN OFF-GRID INVERTER?

In places where there is no grid connection, feeding the loads of the house with the electrical energy produced from solar panels is the purpose for which this device is designed

HOW DOES AN OFF-GRID INVERTER WORK?

An off-grid inverter basically works with the principle of the inverter circuit inside it. The DC electrical energy produced from the solar panels is converted into AC electrical energy used in homes or workplaces thanks to this inverter circuit.

WHY AN OFF-GRID INVERTER?

Thanks to the battery connection, it can store energy; and in cloudy weather or during evening hours, by using the power in the battery it provides uninterrupted energy. In this way, regardless of the grid status, generating electricity from the sun can be continued.

WHERE IS AN OFF-GRID INVERTER USED?

In systems that have grid electricity and where self-consumption will be performed, in places where grid electricity is not available or the grid line It is a preferred alternative in areas where installation is costly and power outages are frequent.

WHO USES OFF-GRID INVERTERS?

Off-grid solar inverters are widely used by individuals and organizations that want to meet their energy needs without being connected to the electrical grid. These inverters convert the direct current (DC) produced by solar panels into alternating current (AC), enabling the operation of electrical devices.

OFF-GRID INVERTER OPERATING PRINCIPLE

In an Off-Grid system, the DC power produced from the solar panel or battery is transmitted to the inverter. The inverter responds to sudden changes in its direction with a capacitor and inductor circuit, and in this process, the current rises and falls to create a sinusoidal waveform. The generated waveform can be a pure or modified waveform.

ADVANTAGES OF OFF-GRID INVERTERS

- Off-Grid systems allow you to be completely independent in terms of energy, and this independence can also be considered as a security feature.
- Its biggest advantage is that it offers a 100% independent energy source. You do not need to make any payments for electricity costs and you are completely protected from rising energy prices.
- Since you do not need a grid connection, you are not affected by power outages.
- The installation time of the systems is quite short; thus, they become ready for use quickly.
- Installation is very easy; long and complex assembly processes are not required.
- Off-Grid systems offer the flexibility to expand according to your future needs.
- Reduces generator dependency, thereby saving on additional costs. Like all renewable energy systems, Off-Grid systems are eco-friendly and produce no gas emissions.
- By integrating with batteries in areas without grid electricity, it provides a solution independent of power outages.
- Off-Grid systems can be used for many years with proper project design and operating conditions; after the initial installation. it helps reduce regular electricity expenses by decreasing the need for grid electricity. Battery and other equipment may require maintenance or replacement depending on their service life.
- Although maintenance requirements may vary depending on usage and environmental conditions, regular inspections and appropriate periodic maintenance can support the efficient operation of the system.



OFF-GRID / Single-Phase Inverter



OFG-TT-01-NEW1K-12MF



OFG-TT-03-NEW3K-24MF



OFG-TT-05-NEW5K-48MF



OFF-GRID / Single-Phase Inverter



OFG-TT-C-PROX-1.5K-12MF



OFG-TT-C-PROX-4.2K-24MF



OFG-TT-C-PROX-6.2K-48MF



OFG-TT-C-PROX-8.0K-48MF



OFF-GRID UPS / Single-Phase Inverter



OFG-TT-Z-UPS-6.2K-48MF



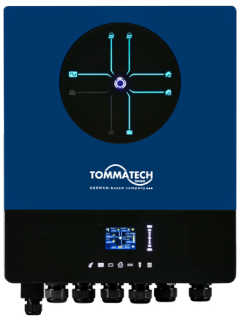
OFG-TT-C-PRO3K-WIFI-24MF



OFG-TT-C-PRO5K-WIFI-48MF



OFG-TT-C-PLUS-N-10K-48MF

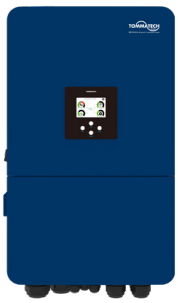


OFG-TT-C-PLUSX-11K-48MF

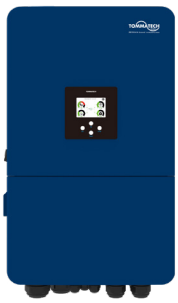
HYBRID / Three-Phase Inverter



INV-HYB-LV-48V-10K-G2-TF



INV-HYB-48V-15K-F-TF



INV-HYB-48V-20K-F-TF

High Efficiency

Ensures maximum efficiency from solar energy with advanced MPPT technology

More Energy
Higher Savings

Generator Supported

Never Run Out of Energy

Smart Power Support

Pure Sine Wave Output

Stable, clean and safe energy for sensitive devices.

Pure and Balanced Power



Practical Energy Solution

Easy Installation

Offers a fast and effortless experience with its compact design and user-friendly structure



TOMMATECH NEW BASIC SERIES MONOFAZE OFF-GRID INVERTERS

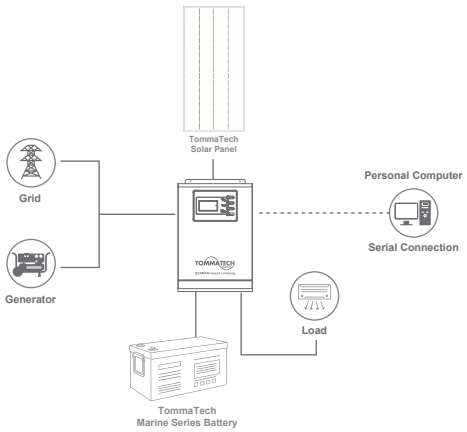
1kW - 3kW - 5kW



Product Features

- Energy Storage Solutions
- Pure Sine Wave Output
- Cold Start
- Dust Prevention Kit
- 1 Phase AC Output
- Generator Supported
- Easy Installation
- Overload & Short Circuit Protection
- 2 Years Warranty

Connection Diagram



MODEL	TT 1K 12V	TT 1K 12V MPPT	TT 3K 24V	TT 3K 24V MPPT	TT 5K 48V	TT 5K 48V MPPT
Nominal Power [VA/W]	1000 / 1000		3000 / 3000		5000 / 5000	
Parallel Operation Capacity	None					
AC INPUT						
Voltage [V AC]	230					
Selectable Voltage Range [V AC]	170-280 (for personal computers) ; 90-280 (for household appliances)					
Nominal Frequency [Hz]	50 / 60 (Auto Sensing)					
DC INPUT						
Maximum Input Current [A]	50	18	50	18	50	50
Maximum Short-Circuit Current [A]	50	22	50	22	50	60
MPPT Voltage Range [V]	N/A	17 ~ 80	N/A	30 ~ 80	N/A	60 ~ 115
Number of MPPTs	N/A	1	N/A	1	N/A	1
Number of MPPT String Inputs	N/A	1	N/A	1	N/A	1
OUTPUT						
AC Voltage Regulation (Battery Mode) [V AC]	230 ± 5%					
Surge Power [VA]	2000		6000		10000	
Peak Efficiency [%]	90 ~ 93					
Automatic Transfer Time [ms]	10 (for personal computers) ; 20 (for household appliances)					
Waveform	Pure Sine Wave					
BATTERY						
Battery Voltage [V]	12		24		48	
Float Charging Voltage [V]	13.		27		54	
Overcharge Protection [V]	16		33		63	
SOLAR CHARGE CONTROLLER & AC CHARGER						
Solar Charger Type	PWM	MPPT	PWM	MPPT	PWM	MPPT
Max. PV Array Open-Circuit Voltage [V]	55	102	80	102	105	145
Max. PV Array Power [W]	600	500	1200	1000	2400	3000
MPPT Operating Voltage Range [V]	N/A	17 ~ 80	N/A	30 ~ 80	N/A	60 ~ 115
Max. Solar Charging Current [A]	50	40	50	40	50	60
Max. AC Charging Current [A]	20		25		60	
Max. Charging Current [A]	50	60	70	60	110	120
PHYSICAL CHARACTERISTICS						
Depth x Width x Height [mm]	88 x 225 x 320		100 x 285 x 334		100 x 300 x 440	
Net Weight [kg]	4.4	4.4	6.3	6.5	8.5	9.7
Communication Interface	USB/RS232					
ENVIRONMENTAL CHARACTERISTICS						
Relative Humidity [%]	5–95% relative humidity (non-condensing)					
Operating Temperature [°C]	-10 ~ 50					
Storage Temperature [°C]	-15 ~ 60					
STANDARD						
Compliance	CE					
WARRANTY						
Product Warranty	2 Years					

TOMMATECH C PRO SERIES MONOFAZE OFF-GRID INVERTERS

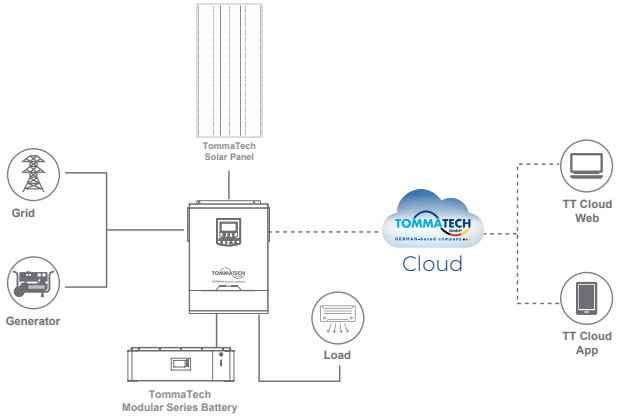
3kW - 5kW



Product Features

- High Efficiency
- Pure Sine Wave Output
- Energy Storage Solutions
- Dust Prevention Kit
- 1 Phase AC Output
- Generator Supported
- 100A Charge/ Discharge Current
- Wide MPPT Voltage Range
- Battery Independent
- Easy Installation
- Remote Monitoring
- Battery Equalization
- BMS Communication
- 2 Years Warranty

Connection Diagram



MODEL	C Pro 3K	C Pro 5K
Nominal Power [VA/W]	3000 / 3000	5000 / 5000

AC INPUT		
Voltage [V AC]	230	
Selectable Voltage Range [V AC]	170-280 (for personal computers) ; 90-280 (for household appliances)	
Nominal Frequency [Hz]	50 / 60 (Auto Sensing)	

DC INPUT		
AC Voltage Regulation [V AC]	230 ± 5%	
Surge Power [VA]	6000	10000
Peak Efficiency [%]	90 ~ 93	
Automatic Transfer Time [ms]	10 (for personal computers) ; 20 (for household appliances)	
Waveform	Pure Sine Wave	

BATTERY		
Battery Voltage [V]	24	48
Float Charging Voltage [V]	27	54
Overcharge Protection [V]	32	64

SOLAR CHARGE CONTROLLER & AC CHARGER		
Solar Charger Type	MPPT	
Max. PV Array Open-Circuit Voltage [V]	450	500
Max. PV Array Power [W]	3000	5000
MPPT Operating Voltage Range [V]	60~400	120~450
Max. Solar Charging Current [A]	80A	100A
Max. AC Charging Current [A]	80A	100A
Max. Charging Current [A]	100A	
Max. PV Input Current [A]	13A	18A

PHYSICAL CHARACTERISTICS		
Depth x Width x Height [mm]	110 x 288 x 390	120 x 300 x 440
Net Weight [kg]	7.2	10
Communication Interface	RS232/RS485, Optional Wi-Fi	

ENVIRONMENTAL CHARACTERISTICS	
Relative Humidity [%]	5–95% relative humidity (non-condensing)
Operating Temperature [°C]	-10 ~ 50
Storage Temperature [°C]	-15 ~ 60

STANDARD	
Compliance	CE

WARRANTY	
Product Warranty	2 Years

TOMMATECH C PROX SERIES MONOFAZE OFF-GRID INVERTERS

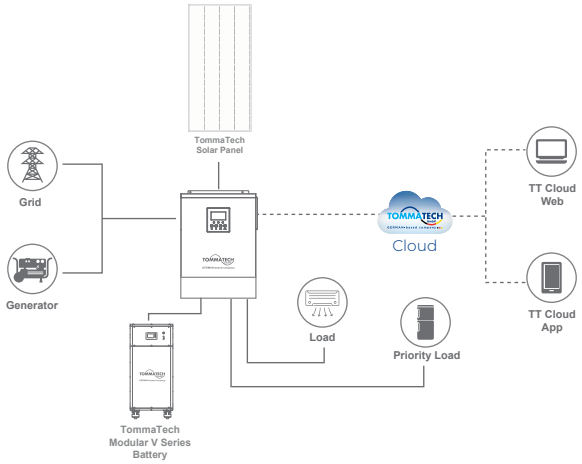
1.5kW / 4.2kW / 6.2kW / 8kW



Product Features

- High Efficiency
- Dual Load Output (Except 1.5K)
- Dust Prevention Kit
- 1 Phase AC Output
- Battery Independent
- Wide MPPT Voltage Range
- Generator Supported
- Pure Sine Wave Output
- Easy Installation
- Remote Monitoring
- BMS Communication
- 2 Years Warranty

Connection Diagram



MODEL	C ProX 1.5K	C ProX 4.2K	C ProX 6.2K	C ProX 8K
Nominal Power [VA/W]	1500VA / 1500W	4200VA / 4200W	6200VA / 6200W	8000VA / 8000W

INPUT				
Voltage	230 VAC			
Selectable Voltage Range	170–280 VAC (PC) 90–280 VAC (household appliances)			
Frequency Range	50 / 60 Hz (Auto Sensing)			

OUTPUT				
AC Voltage Regulation (Battery Mode)	230VAC ± %5			
Output Power	1500W (PV + Battery) 1200W (Battery only)	4200W (PV + Battery), 4000W (Battery only)	6200W (PV + Battery), 5000W (Battery only)	8000W (PV + Battery)
Number of AC Outputs	Single	Dual	Dual	Dual
Surge Power [VA]	3000VA	8400VA	12400VA	16000VA
Maximum Efficiency	93%			
Transfer Time	10 ms (PC) / 20 ms (household appliances)			
Waveform	Pure Sine Wave			

BATTERY				
Battery Voltage	12 VDC	24 VDC	48 VDC	48 VDC
Float Charging Voltage	13.5 VDC	27 VDC	54 VDC	54 VDC
Overcharge Protection	16 VDC	32 VDC	63 VDC	66 VDC

SOLAR CHARGER & AC CHARGER				
Type	MPPT			
Max. PV Open-Circuit Voltage	350 VDC	500 VDC	500 VDC	500 VDC
Max. PV Power	2000W	5000W	6500W	10000W (5000W x2)
Max. PV Input Current	13A	18A	18A	22 A x2
MPP Range @ Operating Voltage	30–300 VDC (min. 60VDC without battery)	30-450VDC (min. 60VDC without battery)	90–450 VDC (min. 100VDC without battery)	90–450 VDC
Max. Solar Charging Current	100 A	120 A	100 A	120 A
Max. AC Charging Current	80 A	100 A	100 A	120 A
Max. Charging Current	100 A	120 A	100 A	120 A

PHYSICAL CHARACTERISTICS				
Dimensions (D × W × H mm)	90 × 288 × 357	115 × 300 × 435	115 × 300 × 435	141 × 322 × 497
Weight (kg)	6,6 Kg	9 Kg	10,4 Kg	15 Kg
Communication Interface	RS232 / RS485 (BMS) / WiFi			

OPERATING ENVIRONMENT	
Humidity	5–95% (non-condensing)
Operating Temperature	-10°C ~ +50°C
Storage Temperature	-15°C ~ +60°C

STANDARD	
Compliance	CE

WARRANTY	
Product Warranty	2 Years

TOMMATECH C PLUSX SERIES MONOFAZE OFF-GRID INVERTERS

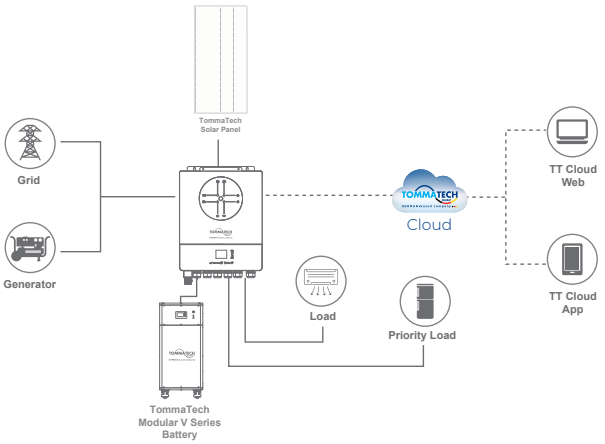
11kW



Product Features

- High Efficiency
- Dual Load Output
- Dust Prevention Kit
- 1 Phase AC Output
- Battery Independent
- PV High Voltage
- Expand able System Up to 6 Units
- Dual MPPT 13 kW PV Input Power
- Generator Supported
- Pure Sine Wave Output
- Easy Installation
- Remote Monitoring
- BMS Communication
- Dual Input (Grid + Generator)
- 150A Charge Current
- 2 Years Warranty

Connection Diagram



MODEL	C PlusX 11K 48V MPPT
Nominal Power [VA/W]	11000VA / 11000W
Parallel Operation	6 Up to Units

INPUT (GRID & GENERATOR POWER)	
Voltage	230 VAC
Selectable Voltage Range	170–280 VAC (for computers) / 90–280 VAC (for household appliances)
Frequency Range	50 Hz / 60 Hz (Auto Sensing)

OUTPUT	
AC Voltage Regulation (Battery Mode)	230VAC ± %5
Surge Power [VA]	22000VA
Maximum Efficiency	93%
Transfer Time	10 ms (for computers), 20 ms (for household appliances)
Waveform	Pure Sine Wave

BATTERY	
Battery Voltage	48 VDC
Float Charging Voltage	54 VDC
Overcharge Protection	63 VDC

SOLAR CHARGER & AC CHARGER	
Solar Charger Type	MPPT
Maximum PV Array Power	13000W (6500W x 2)
MPPT Operating Voltage Range	90–450 VDC
Maximum PV Open-Circuit Voltage	500 VDC
Maximum PV Input Current	27A x 2 (Maks. 40A)
Maximum Solar Charging Current	150A
Maximum AC Charging Current	150A
Maximum Charging Current	150A

PHYSICAL CHARACTERISTICS	
Dimensions (D × W × H mm)	145 × 438 × 553,6 mm
Net Weight	19,5 kg
Communication Interface	USB / RS232 / RS485 / WiFi / Dry Contact / BTS
Additional Features	Optional GFCI, rapid shutdown and AFCI detection support
External Current Sensor Port	Yes, current transformer sensor included

OPERATING ENVIRONMENT	
Humidity	5–95% (non-condensing)
Operating Temperature	-10°C ~ +50°C
Storage Temperature	-15°C ~ +60°C

STANDARD	
Compliance	CE

WARRANTY	
Product Warranty	2 Years

TOMMATECH C PLUS NEO SERIES MONOFAZE OFF-GRID INVERTERS

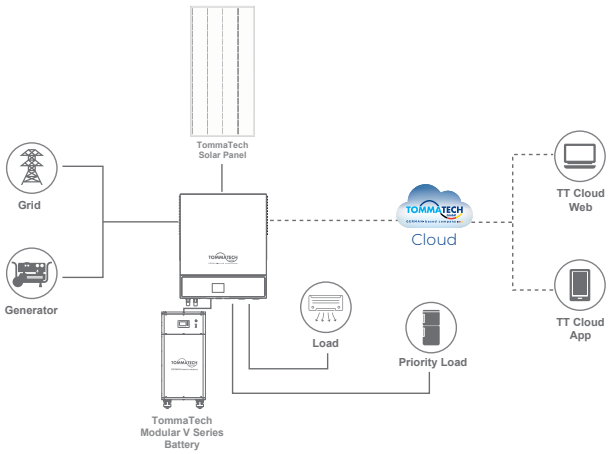
10kW



Product Features

- Expandable System Up to 12 Units
- Pure Sine Wave Output
- Dual Load Output
- 1 Phase AC Output
- Generator Supported
- Very Low Idle Consumption
- Remote Monitoring
- BMS Communication
- Anti-Dust & Humidity Coating
- IP52 Protection
- 2 Years Warranty

Connection Diagram



MODEL	TommaTech C Plus Neo 10K
Nominal Power [VA/W]	10000 VA / 10000 W
Parallel Operation	12 Up to Units

AC INPUT	
Voltage	230 VAC
Selectable Voltage Range	170–280 VAC (for personal computers), 90–280 VAC (for household appliances)
Nominal Frequency	50 Hz / 60 Hz (Auto Sensing)

OUTPUT	
AC Voltage Regulation (Battery Mode)	230VAC ± %5
Surge Power [VA]	20000 VA
Maximum Efficiency	93%
Transfer Time	10 ms (for personal computers), 20 ms (for household appliances)
Waveform	Pure Sine Wave

BATTERY	
Battery Voltage	48 VDC
Float Charging Voltage	54 VDC
Overcharge Protection	63 VDC

SOLAR CHARGER & AC CHARGER	
Solar Charger Type	MPPT
Max. PV Array Open-Circuit Voltage [V]	500 VDC
Max. PV Array Power [W]	13000 W (6500W x2)
MPPT Range @ Operating Voltage [V]	90 ~ 450 VDC
Max. Solar Charging Current [A]	150 A
Max. AC Charging Current [A]	150A
Max. PV Input Current [A]	30 A x 2 (Maks. 45 A)

PHYSICAL CHARACTERISTICS	
Dimensions (D × W × H mm)	107,4 × 420 × 506 mm
Net Weight	17,7 kg
Communication Interface	USB / RS232 / RS485 / Wi-Fi / Dry Contact

OPERATING ENVIRONMENT	
Humidity	5% to 95% relative humidity (non-condensing)
Operating Temperature	-10°C ~ +50°C
Storage Temperature	-15°C ~ +60°C
IP Rating	IP52

STANDARD	
Compliance	CE

WARRANTY	
Product Warranty	2 Years

TOMMATECH ZERO UPS SERIES MONOFAZE OFF-GRID INVERTERS

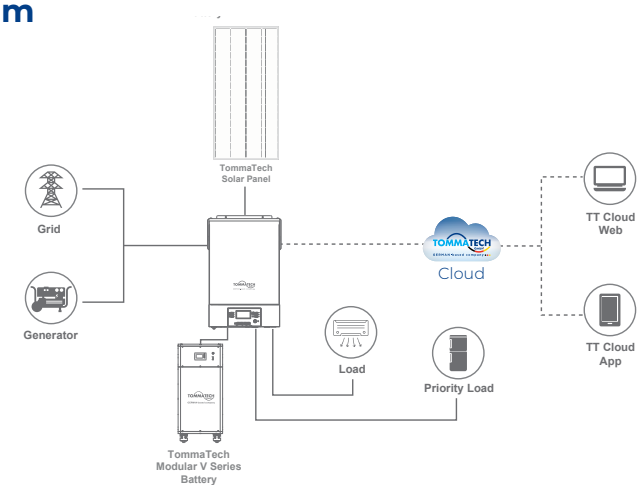
6.2kW



Product Features

- Transfer Time to Auxiliary Source During Grid Outage 0ms
- 40–66 V Wide Battery Range
- Generator Supported
- 1 Phase AC Output
- MPPT High Efficiency
- Pure Sine Wave Output
- BMS Communication
- Remote Monitoring
- Parallel Up to 9 Units with External Card (55,8 kW)
- 120A Charge Current
- ECO Mode %98 Efficiency
- Dual Load Output
- 2 Years Warranty

Connection Diagram



MODEL	TommaTech Zero UPS 6.2K
Nominal Power [VA/W]	6200VA/6200W
Parallel Operation	9 Up to Units
AC INPUT	
Voltage	230 VAC
Selectable Voltage Range	110-280 VAC
Nominal Frequency	50 Hz/60 Hz (Auto Sensing) ± 4 Hz
Power Factor	≥ 0.98 @ Nominal Voltage (100% Load)
THDi	≤ %10
OUTPUT	
AC Voltage Regulation (Battery Mode)	230VAC ± %5
Frequency Range (Synchronized Range)	46–54 Hz veya 56–64 Hz
Frequency Range (Battery Mode)	50 Hz ± 0,1 Hz veya 60 Hz ± 0,1 Hz
Harmonic Distortion	≤ 3% THD (Linear Load); ≤ 5% THD (Nonlinear Load)
Surge Power [VA]	6000
Transfer Time - AC Mode to Battery Mode	0 ms
Transfer Time - Inverter to Bypass	4 ms (Tipik)
Waveform	Pure Sine Wave
EFFICIENCY	
Grid Mode	94%
ECO Mode	98%
Battery Mode	92%
BATTERY	
Battery Voltage	40~66 VDC
Float Charging Voltage	54 VDC
Overcharge Protection	66 VDC
SOLAR CHARGER & AC CHARGER	
Solar Charger Type	MPPT
Max. PV Array Power [W]	6000 W
MPPT Range @ Operating Voltage [V]	120 ~ 430 VDC
Max. PV Array Open-Circuit Voltage [V]	500 VDC
Max. Solar Charging Current [A]	120 A
Max. AC Charging Current [A]	120 A
Max. PV Input Current [A]	27A
PHYSICAL CHARACTERISTICS	
Dimensions (D × W × H mm)	140 x 295 x 468 mm
Net Weight	12 Kg
Communication Interface	RS232, USB, Dry Contact, Wi-Fi, RS485
OPERATING ENVIRONMENT	
Humidity	5% to 95% relative humidity (non-condensing)
Operating Temperature	-10°C ~ +50°C
Storage Temperature	-15°C ~ +60°C
STANDARD	
Compliance	EN 62109-1/2 EN IEC 61000-3-11/12 EN IEC 61000-6-2/4 Low Voltage Directive 2014/35/EU
WARRANTY	
Product Warranty	2 Years

TOMMATECH TRIO HYBRID LOW VOLTAGE F SERIES G2 HYBRID INVERTERS

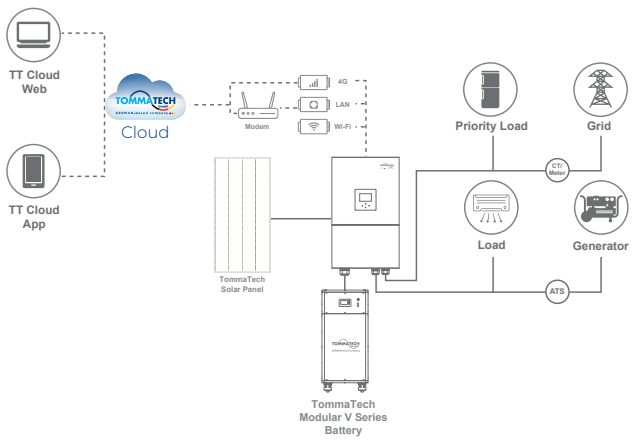
10kW



Product Features

- Expandable System Up to 10 Units
- 48V Battery Input Voltage
- 240A — Up to 240A 3 Charge/ Discharge
- Generator Supported
- 3 Phase AC Output
- Phase Balancing
- MPPT High Efficiency
- Wind Turbine Support
- Remote Monitoring
- BMS — BMS Communication
- IP65 Protection
- 5 Years Warranty

Connection Diagram



MODEL	TRIO HYBRID LV 3.0F G2	TRIO HYBRID LV 4.0F G2	TRIO HYBRID LV 5.0F G2	TRIO HYBRID LV 6.0F G2	TRIO HYBRID LV 8.0F G2	TRIO HYBRID LV 10.0F G2	TRIO HYBRID LV 12.0F G2
BATTERY DATA							
Battery Type	Lead-Acid or Lithium-Ion						
Battery Voltage Range [V]	40-60						
Maximum Charge/Discharge Current [A]	70	95	120	135	190	210	240
Charging Method for Li-Ion Battery	Automatic Adaptation to BMS						
Number of Battery Inputs	1						
PV ARRAY INPUT DATA							
Maximum Connectable PV Input Power [W]	6000	8000	10000	12000	16000	20000	24000
Maximum Usable PV Input Power [W]	4800	6400	8000	9600	12800	16000	19200
Max. PV Input Voltage [V]	800						
Start-up Voltage [V]	160						
MPPT Voltage Range [V]	200-650						
Nominal PV Input Voltage [V]	550						
Max. Operating PV Input Current [A]	20+20					26+26	
Max. Input Short-Circuit Current [A]	30+30					39+39	
Number of MPPTs / Number of MPPT String Inputs	2 / 1+1					2 / 2+2	
AC INPUT/OUTPUT DATA							
Nominal AC Input/Output Active Power [W]	3000	4000	5000	6000	8000	10000	12000
Max. AC Input/Output Apparent Power [VA]	3300	4400	5500	6600	8800	11000	13200
Nominal AC Input/Output Current [A]	4,6 / 4,4	6,1 / 5,8	7,6 / 7,3	9,1 / 8,7	12,2 / 11,6	15,2 / 14,5	18,2 / 17,4
Max. AC Input/Output Current [A]	5 / 4,8	6,7 / 6,4	8,4 / 8	10 / 9,6	13,4 / 12,8	16,7 / 16	20 / 19,2
Max. Continuous AC Pass-Through (Grid to Load) [A]	45						
Peak Power (Off-Grid) [W]	2 times nominal power for 10 s						
Displacement Power Factor Adjustment Range	0.8 leading to 0.8 lagging						
Nominal Input/Output Voltage / Range [V]	220/380 V, 230/400 V; 0,85Un-1,1Un; 3L+N+PE						
Nominal Input/Output Grid Frequency / Range [Hz]	50/45-55, 60/55-65						
Total Current Harmonic Distortion (THDi)	<3% (at nominal power)						
DC Injection Current	<%0,5 In						
EFFICIENCY							
Max. Efficiency [%]	97.6%						
European Efficiency [%]	97.0%						
MPPT Efficiency [%]	>99%						
PROTECTION							
Integrated	DC reverse-polarity protection, AC output overcurrent protection, thermal protection, AC output overvoltage protection, AC output short-circuit protection, DC component monitoring, arc-fault circuit interrupter (AFCI), anti-islanding protection, DC switch, insulation impedance detection, residual current detection						
Surge Protection Level	TYPE II (DC), TYPE II (AC)						
INTERFACE							
LCD/LED Display	LCD						
Communication Interface	Wi-Fi, RS485, CAN						
GENERAL DATA							
Operating Temperature Range [°C]	-40 to +60°C, derating above 45°C						
Permissible Ambient Humidity	%0-100						
Permissible Altitude	3000 m						
Noise Emission [dB]	≤55						
IP Rating	IP65						
Inverter Topology	Non-isolated (Solar), Isolated (Battery)						
Overvoltage Category	OVC II (DC), OVC III (AC)						
Enclosure Dimensions [W×H×D mm]	386×660×250 (Excluding Connectors and Brackets)						
Weight [kg]	35,2						
Cooling	Smart Air Cooling						
Warranty	5 Years						
STANDARDS							
Certifications	EN 50549, Low Voltage Directive EU 2014/35, EN/IEC 62109-1/2, VDE-AR-N 4105, IEC 61727, IEC 62116, IEC 61683, IEC 60068-2-1/2/14/30, EN IEC 61000-6-1/2/3/4, EN IEC 61000-3-2/11, EN 61000-3-3/12, EN 55011						

TOMMATECH TRIO HYBRID LOW VOLTAGE F SERIES HYBRID INVERTERS

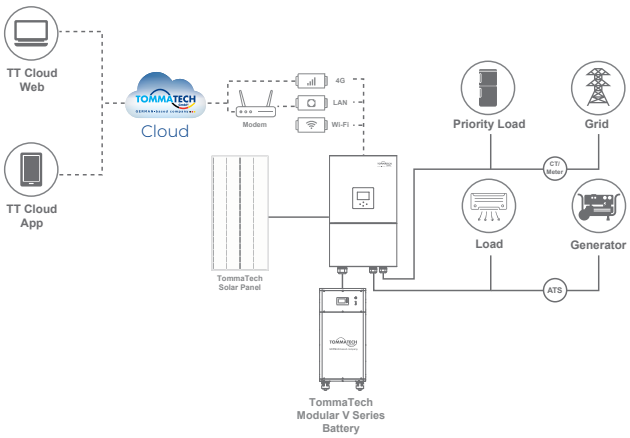
15kW - 20kW



Product Features

- Expandable System Up to 10 Units
- 48V Battery Input Voltage
- Three-Phase AC Output
- Up to 350A Charge/ Discharge
- BMS Communication
- Generator Supported
- Phase Balancing
- MPPT High Efficiency
- Dual Low Voltage Battery Input
- Wind Turbine Support
- Remote Monitoring
- PV High Voltage
- IP65 Protection
- 5 Years Warranty

Connection Diagram



MODEL	TRIO HYBRID LV 15.0F	TRIO HYBRID LV 20.0F
BATTERY DATA		
Battery Type	Lead-Acid or Lithium-Ion	
Battery Voltage Range [V]	40-60	
Maximum Charging Current [A]	280	350
Maximum Discharging Current [A]	280	350
Charging Method for Li-Ion Battery	Automatic Adaptation to BMS	
Number of Battery Inputs	2	
PV ARRAY INPUT DATA		
Maximum Usable PV Input Power (W)	24000	32000
Maximum Connectable PV Input Power (W)	30000	40000
Max. PV Input Voltage (V)	800	
Start-up Voltage (V)	160	
MPPT Voltage Range (V)	160-650	
Nominal PV Input Voltage (V)	550	
Max. Operating PV Input Current (A)	36+36	
Max. Input Short-Circuit Current (A)	54+54	
Number of MPPTs / Number of MPPT String Inputs	2 / 2+2	
AC INPUT/OUTPUT DATA		
Nominal AC Input/Output Active Power (W)	15000	20000
Max. AC Input/Output Apparent Power (VA)	16500	22000
Nominal AC Input/Output Current (A)	22.8/21.8	30.4/29
Max. AC Input/Output Current (A)	22.8/21.8	30.4/29
Max. Continuous AC Pass-Through (Grid to Load) (	70	
Peak Power (Off-Grid) (W)	2 times nominal power for 10 s	
Displacement Power Factor Adjustment Range	0.8 leading to 0.8 lagging	
Nominal Input/Output Voltage/Range (V)	220/380V, 230/400V 0 ,85Un-1,1Un	
Nominal Input/Output Grid	50/45-55, 60/55-65	
Frequency/Range (Hz) Grid Connection Type	3L+N+PE	
Total Current Harmonic Distortion	<3% (at nominal power)	
THDi / DC Injection Current	<0.5% In	
Parallel Connection (Units)	10	
EFFICIENCY		
Max. Efficiency [%]	97.6%	
European Efficiency [%]	97.0%	
MPPT Efficiency [%]	>99%	
PROTECTION		
Integrated	DC reverse-polarity protection, AC output overcurrent protection, AC output overvoltage protection, AC output short-circuit protection, thermal protection, DC terminal insulation impedance monitoring, DC component monitoring, ground-fault current monitoring, grid monitoring, anti-islanding protection, ground-fault detection, DC input switch, overvoltage load-shedding protection, residual current (RCD) detection, surge protection level	
Overvoltage Category	TYPE II (DC), TYPE II (AC)	
INTERFACE		
BMS Communication Interface	RS485/RS232/CAN	
Monitoring Mode	GPRS/WIFI/Bluetooth/4G/LAN (optional)	
GENERAL DATA		
Operating Temperature Range (°C)	-40 to +60 (>45 derating)	
Humidity [%]	0-100%	
Altitude [m]	<3000	
Noise Emission [dB]	<60	
Protection Rating	IP65	
Topology	Non-isolated	
Overvoltage Category	OVC II (DC), OVC III (AC)	
Enclosure Dimensions	456×750×268,5 (Excluding Connectors and Brackets)	
Weight	50.6	
Cooling	Smart Cooling	
Warranty	5 Years	
STANDARDS		
Certifications	EN 50549, Low Voltage Directive EU 2014/35, EN/IEC 62109-1/2, VDE-AR-N 4105, IEC 61727, IEC 62116, IEC 61683, IEC 60068-2-1/2/14/30, EN IEC 61000-6-1/2/3/4, EN IEC 61000-3-2/11, EN 61000-3-3/12, EN 55011	

TOMMATECH GmbH
GERMAN-based company



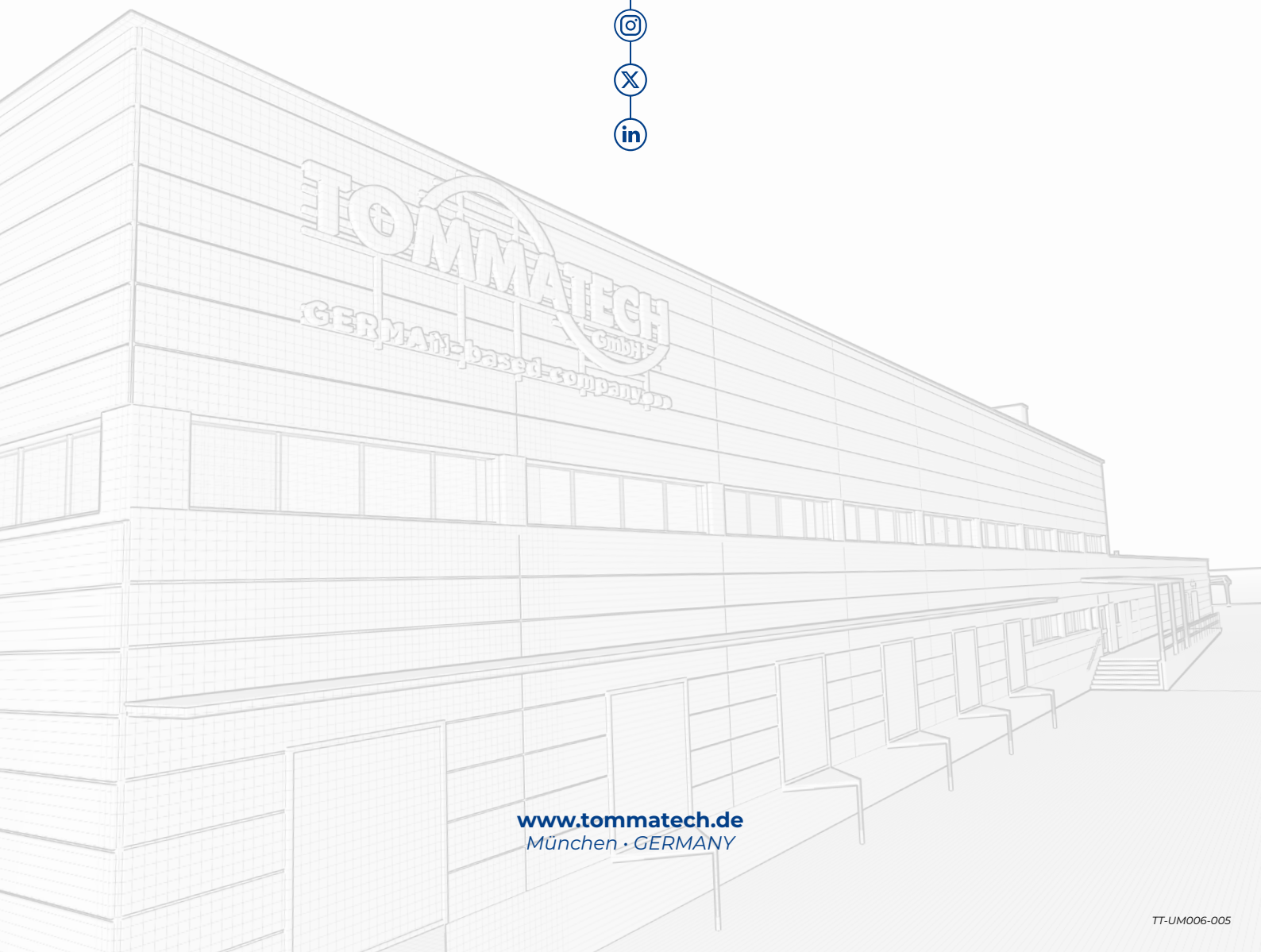
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