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**Fronius**

# **pv magazine** **spotlight**

**Maximum efficiency  
at work – Fronius'  
GEN24 Plus hybrid  
inverter**



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**Erica Johnson**  
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**MAXIMUM EFFICIENCY AT WORK –  
FRONIUS GEN24 PLUS HYBRID INVERTER**

/ Perfect Welding / Solar Energy / Perfect Charging

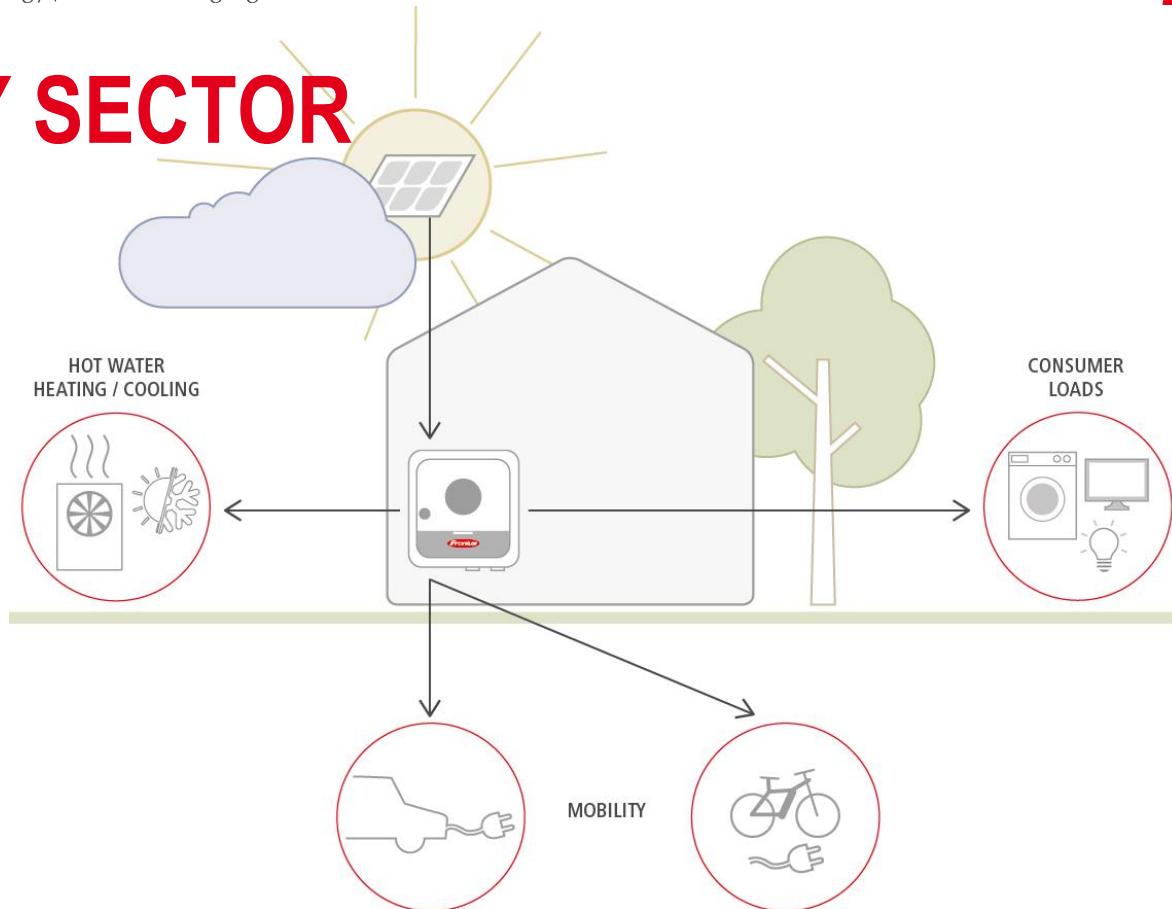


# FRONIUS GEN24 PLUS

UNIQUELY VERSATILE



# ENERGY SECTOR COUPLING



# FRONIUS GEN24 PLUS

## UNIQUELY VERSATILE

Fronius Primo GEN24 Plus

Fronius Symo GEN24 Plus

Single-phase

Three-phase

Power classes: 3 - 6 kW

Power classes: 6 - 10 kW

2 MPPT + 1 battery input

2 MPPT + 1 battery input



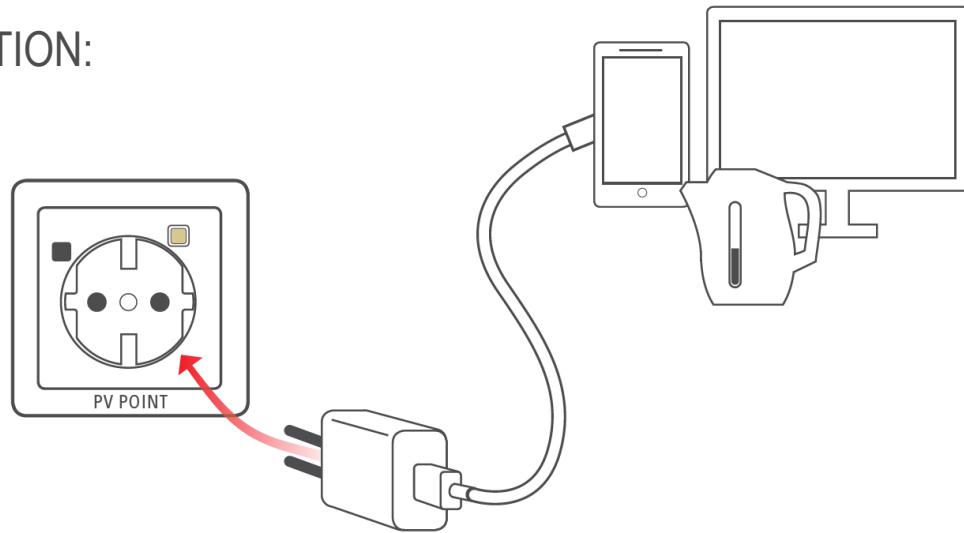
# THE GEN24 PLUS

## FOR MAXIMUM INDEPENDENCE DURING A GRID OUTAGE



### BASIC BACKUP POWER FUNCTION: PV POINT

- / Socket supplied in case of a grid outage
- / Loads up to 3 kW
  - / Symo: 4.1 kW for 5 sec. (starting power)
  - / Primo: 4.7 kW for 5 sec. (starting power)
- / Works with and without a battery
- / No time-consuming additional installation  
(backup switch) required



# THE GEN24 PLUS

## FOR MAXIMUM INDEPENDENCE DURING A GRID OUTAGE

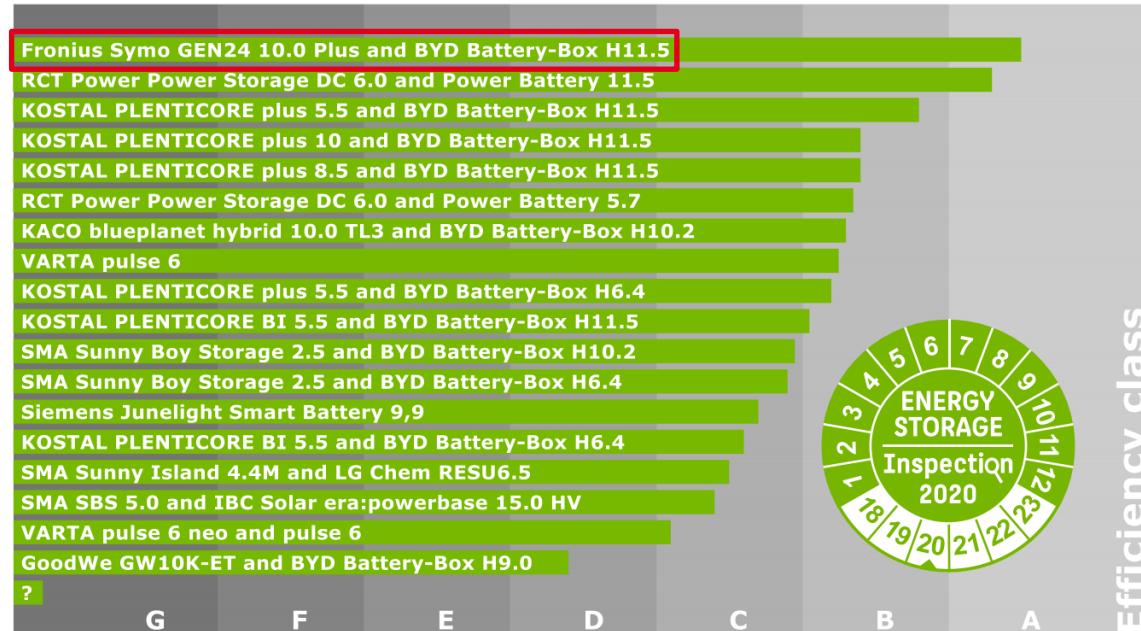


### REAL 3-PHASE BACKUP POWER: **FULL BACKUP**

- / Supply of the entire household
- / Real, 3-phase backup power (Symo GEN24 Plus)
- / Energy independence in case of a grid outage
- / Automatic switchover
- / Battery is required



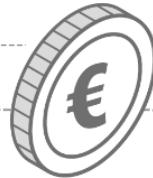
# THE GEN24 PLUS FOR MAXIMUM SYSTEM EFFICIENCY WITH BYD



1<sup>ST</sup> PLACE AT THE ENERGY STORAGE  
INSPECTION OF HTW BERLIN

94% OVERALL EFFICIENCY WITH BYD

/ best result of all time



Maximum yields

Highest self-consumption rate

Fastest profitability

# THE GEN24 PLUS

## FOR MAXIMUM FLEXIBILITY IN SYSTEM DESIGN



### SUPERFLEX DESIGN

- / Broad DC input voltage range
- / 2 MPP Tracker + extra battery input
- / Symo GEN24 Plus (3-phase): 80-1000V DC
- / Primo GEN24 Plus (1-phase): 65-600V DC



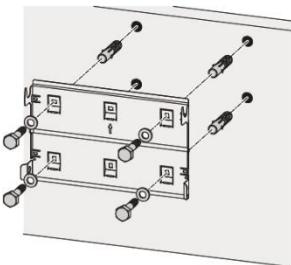
STRINGS FROM 3 MODULES ON  
CAN BE REALISED

# THE GEN24 PLUS

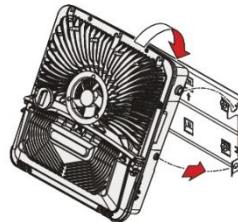
## FOR EASY INSTALLATION AND COMMISSIONING

**FASTEAST COMMISSIONING** with the Solar.start app in 3 easy steps

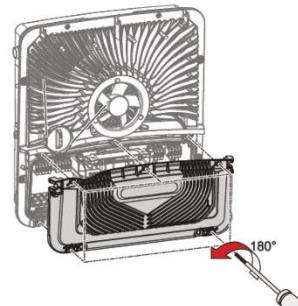
**QUICK INSTALLATION** thanks to new mounting concept



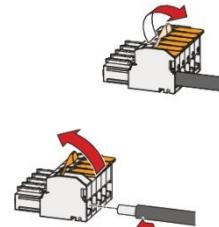
Lightweight wall bracket



Easy mounting concept -  
SnapIN -



Fastest access  
180° locking screws



No tool, no torque  
Spring connection

# THE GEN24 PLUS

## FOR THE FASTEST SERVICE ON THE MARKET



EASY AND FAST EXCHANGE  
OF THE POWER STAGE

NO NEED TO EXCHANGE  
THE WHOLE INVERTER

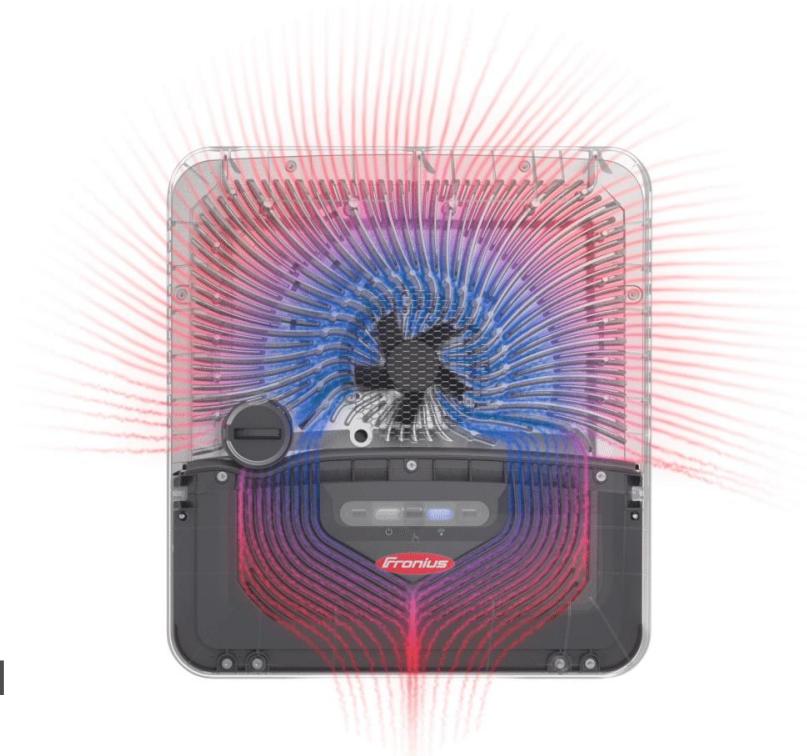
# THE GEN24 PLUS

## FOR THE LONGEST LIFE SPAN



### ACTIVE COOLING

- / LONGER LIFE SPAN  
of the inverter through active cooling
- / LATER POWER DERATING  
at high temperatures
- / MORE YIELD and FASTER AMORTISATION



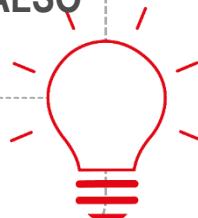
# THE GEN24 PLUS

## FOR MAXIMUM BATTERY CHARGING AND DISCHARGING POWER

- / Battery input with 22 AMP
- / Charging/discharging power up to 9 kW

EFFICIENT USE OF THE BATTERY ALSO  
DURING GRID OUTAGE

HIGHEST  
SELF-CONSUMPTION RATES

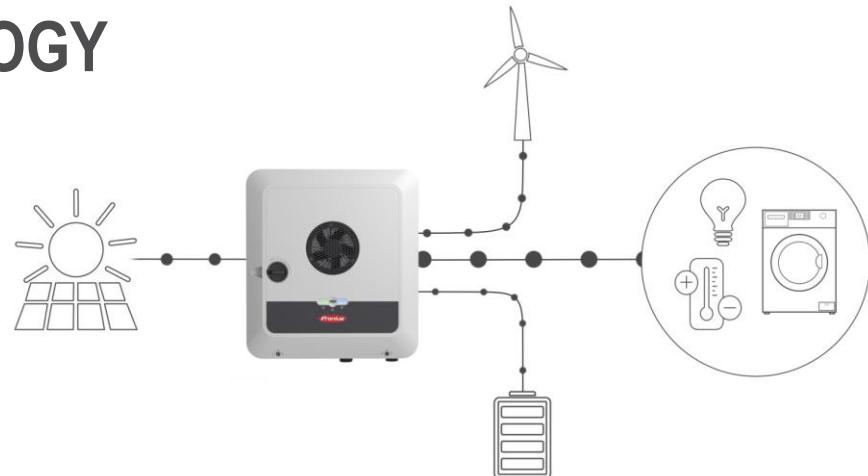


# THE GEN24 PLUS FOR OPTIMAL UTILISATION OF ENERGY



## MULTI FLOW TECHNOLOGY

- / Allows **PARALLEL** energy flows
- / Battery can also be charged from the **AC-SIDE** (e.g. from an existing PV system or wind turbine)



# THE GEN24 PLUS

## FOR MAXIMUM YIELDS DESPITE SHADING



### DYNAMIC PEAK MANAGER

- / Shadow-tolerant algorithm that always finds the **BEST OPERATING POINT** (Global Maximum Power Point)
- / **HIGHEST YIELDS** even with partial shading
- / Efficient shading management can make **POWER OPTIMISER REDUNDANT**



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UNIQUELY VERSATILE



/ Perfect Welding / Solar Energy / Perfect Charging



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