

Fronius Battery Storage Solution

With Fronius GEN24 Plus¹, Fronius Smart Meter² and LG FLEX³



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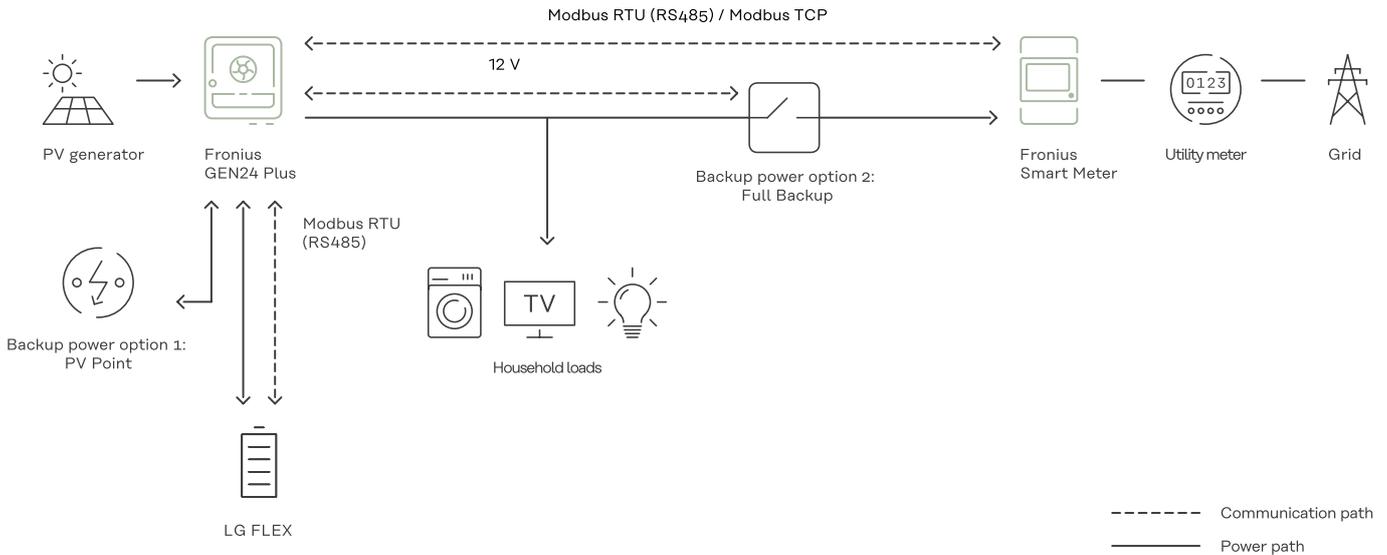


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All benefits at a glance

- 01 Use PV energy, even at night
- 02 Demand-based backup power variants
- 03 Simultaneous supply and charging also possible when using backup power
- 04 High self-consumption and self-sufficiency rates
- 05 Unsurpassed system efficiency thanks to DC coupling

Configuration scheme:



What is needed for implementation?

Device	Type	Notes
Fronius Inverter	Fronius Primo/Symo GEN24 Plus	Depending on the type of inverter and the type and capacity of the battery
Battery storage	LG FLEX	Compatible types of LG FLEX: 8.6 / 12.9 / 17.2 Compatibility of the individual storage types differ for Fronius Primo and Symo GEN24 Plus!
Energy meter	Fronius Smart Meter 63A-1, 63A-3, 50kA-3	Current transformers with an output current of 5 A must be used for the Fronius Smart Meter 50kA-3
	Fronius Smart Meter TS 100A-1, TS 65A-3, TS 5kA-3	Current transformers with an output current of 5 A must be used for the Fronius Smart Meter TS 5kA-3
	Fronius Smart Meter IP	Current transformers with an output voltage of 333 mV must be used for the Fronius Smart Meter IP
Communication	Inverter – battery	The inverter communicates with the battery via a shielded, 4-pole cable (CAT5 and higher) via Modbus RTU (RS485). The terminating resistors must always be placed at the end of the ring. On the LG FLEX software side in the RESU Monitor app. To ensure error-free functionality, the inverter and the battery must always have the latest software update. The software update of the inverter can be activated via Fronius Solar.web.
	Inverter – Smart Meter & Smart Meter TS	Cable connection (CAT5 and higher) via Modbus RTU (RS485)
	Inverter – Smart Meter IP	Cable connection (CAT5 and higher) via Modbus RTU (RS485) or via Modbus TCP (WLAN, LAN)

Backup power options

Device	Type	Notes
Backup power variants*	PV Point (on board)	Socket supplied during backup power operation Single-phase power up to 3 kW Optional battery storage Fuse protection with 30 mA type A RCD required
	PV Point Comfort	Continuously supplied socket (backup power supply and parallel grid operation) Single-phase power up to 3 kW Optional battery storage Fuse protection with 30 mA type A RCD and 13 A line protection required
	Full Backup**	Backup power supplies the entire household when needed (1-phase and 3-phase) Manual or automatic changeover possible Battery storage required Additional contactors for switchover or auxiliary relays are required***

* Only one backup power variant can be implemented.

** The Full Backup option is not available for the Fronius Symo GEN24 3.0 - 5.0 Plus.

*** The requirements for this switchover vary from country to country – please contact your grid operator.

Compatibilities and maximum charge/discharge power:

Nominale DC-Lade-/ Entladeleistung mit GEN24 Plus [kW] *	LG FLEX		
	8.6	12.9	17.2
Primo GEN24 3.0 Plus	3,11	3,11	-
Primo GEN24 3.6 Plus	3,81	3,81	-
Primo GEN24 4.0 Plus	4,14	4,14	-
Primo GEN24 4.6 Plus	4,75	4,75	-
Primo GEN24 5.0 Plus	5,17	5,17	-
Primo GEN24 6.0 Plus	5,17	6,20	-
Primo GEN24 8.0 Plus	5,17	6,20	-
Primo GEN24 10.0 Plus	5,17	6,20	-
Symo GEN24 3.0 Plus	2,94	3,15	3,15
Symo GEN24 4.0 Plus	2,94	4,18	4,18
Symo GEN24 5.0 Plus	2,94	5,20	5,20
Symo GEN24 6.0 Plus	5,17	6,22	6,22
Symo GEN24 8.0 Plus	5,17	7,74	8,26
Symo GEN24 10.0 Plus	5,17	7,74	10,30
Symo GEN24 12.0 Plus SC	5,17	7,74	10,30

* This data refers to the DC charge and discharge power. The DC discharge power varies from the AC power that reaches the loads in the home, since the efficiency rate of the inverter must also be included here.

Monitoring & Digital Tools.

The right digital tool for every phase of the PV system.

From the planning to commissioning phase and from monitoring to service – we support you as an installer with your work so you can provide your customers with the best possible advice and support at all times. And we make sure our support is exceptionally user-friendly, detailed and reliable:

Planning

If you are planning a new project, **Fronius Solar.creator** is your tool of choice. With this **free on-line configuration tool**, you can plan completely independently of location, design the PV system in just a few steps, and use it as a **consultation tool** with your customer. If an existing system needs to be extended with battery storage or the like, the effects can be simulated in advance with **Fronius Solar.web**.

Commissioning

Fronius Solar.start makes system installation more efficient than ever. The app guides you through the setup of Fronius devices in **3 steps** and turns **commissioning**, including configuration, into a simple process that takes only a few minutes.

Monitoring

Once the PV system is successfully in operation, the energy utilization begins – but so does the **system optimization via monitoring**. With **Fronius Solar.web**, we provide you with the best tool for doing this. It allows you to keep a reliable overview of all the PV systems you manage, so you can effectively increase their performance based on data.

Service

Fronius Solar.SOS supports you in **diagnosing and rectifying faults** and in ordering the correct replacement components. And it does this around the clock, regardless of the standard service times, and in the local language.

Any questions?



Here you will find our how-to videos



You can access recordings of our webinars here.

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