

SigenMate – Plug into the Sun



SigenMate EC 2700

Hybrid Inverter & Battery

800 W

On-grid Output Power

2688 Wh

Energy Capacity



SigenMate BAT 2700

Expansion Battery

2688 Wh

Energy Capacity

Go Anywhere. Power Anything.



Balcony
On-grid Single Unit



Garage
On-grid Parallel Connection System



Campsite
Off-grid Single Unit



Cabin
Off-grid Parallel Connection System

SigenMate EC 2700

DC Input (from PV)

Max. PV power	4000 W
Max. DC input voltage	60 V
MPPT voltage range	16 ~ 60 V
Number of MPP. trackers	4
Number of PV strings per MPPT ¹	2
Max. input current per MPPT	32 A
Max. short-circuit current per MPPT	44 A

AC Output (on-grid)

Nominal output power	800 W
Max. output apparent power	800 VA
Nominal output current	3.6 A
Nominal output voltage	220 / 230 / 240 V
Nominal grid frequency	50 / 60 Hz
Power factor	0.8 leading ~ 0.8 lagging
Total voltage harmonic distortion	THDi < 3%

AC Output (backup)

Nominal output power	1200 W
Peak output power (10 seconds)	1800 W
Max. passthrough output power	3600 W
Nominal output voltage	220 / 230 / 240 V
Nominal output frequency	50 / 60 Hz
Power factor	0.8 leading ~ 0.8 lagging
Total voltage harmonic distortion	THDv < 3%

¹. External Y-type terminal is required.

SigenMate EC 2700

Storage System

Battery type	LiFePO ₄
Cell capacity	105 Ah
Total energy capacity	2.688 kWh
Max. charge power	1800 W
Max. discharge power	1200 W

General Data

Dimensions (W / H / D)	460 / 275 / 225 mm
Weight	< 30 kg
Storage temperature range	-30 ~ 65 °C
Operating temperature range	-20 ~ 55 °C
Relative humidity range	0% ~ 100%
Max. operating altitude	4000 m
Cooling	Natural convection
System ingress protection rating	IP66
Installation method	Floor standing
Communication	WLAN

SigenMate BAT 2700

Battery type	LiFePO ₄
Cell capacity	105 Ah
Total energy capacity	2.688 kWh
Max. charge power	1800 W
Max. discharge power	1200 W
Dimensions (W / H / D)	460 / 215 / 225 mm
Weight	25 kg

Others

DC Input (from PV)

Max. PV power	4000 W	3600 W	2000 W
Max. DC input voltage			
MPPT voltage range			
Number of MPP. trackers	4	2	
Number of PV strings per MPPT ¹			
Max. input current per MPPT	32 A		14 A
Max. short-circuit current per MPPT	44 A		20 A

AC Output (on-grid)

Nominal output power	
Max. output apparent power	
Nominal output current	
Nominal output voltage	
Nominal grid frequency	
Power factor	
Total voltage harmonic distortion	

AC Output (backup)

Nominal output power	
Peak output power (10 seconds)	
Max. passthrough output power	
Nominal output voltage	
Nominal output frequency	
Power factor	
Total voltage harmonic distortion	

SigenMate

Vendor A

Vendor E

Others

Storage System

Battery type	
Cell capacity	
Total energy capacity	
Max. charge power	
Max. discharge power	

General Data

Dimensions (W / H / D)
Weight
Storage temperature range
Operating temperature range
Relative humidity range
Max. operating altitude
Cooling
System ingress protection rating
Installation method
Communication

SigenMate

Vendor A

Vendor E

Others - Battery

Battery type
Cell capacity
Total energy capacity
Max. charge power
Max. discharge power
Dimensions (W / H / D)
Weight

SigenMate

Vendor A

Vendor E

4 MPPT

Optimize Each Panel

VS

Vendor A: 2 MPPT

4000 W

Generate More Power

VS

Others: 2000~3600 W

32 A input current

8 Panels, Maximize Your Balcony Space

VS

Vendor E: 14A/4 panels only





From **2.688** to **18.8 kWh**
Expandable capacity

Supports up to
1 host unit & 6 battery expansions

VS

Vendor A: Max. capacity 16.08 kWh

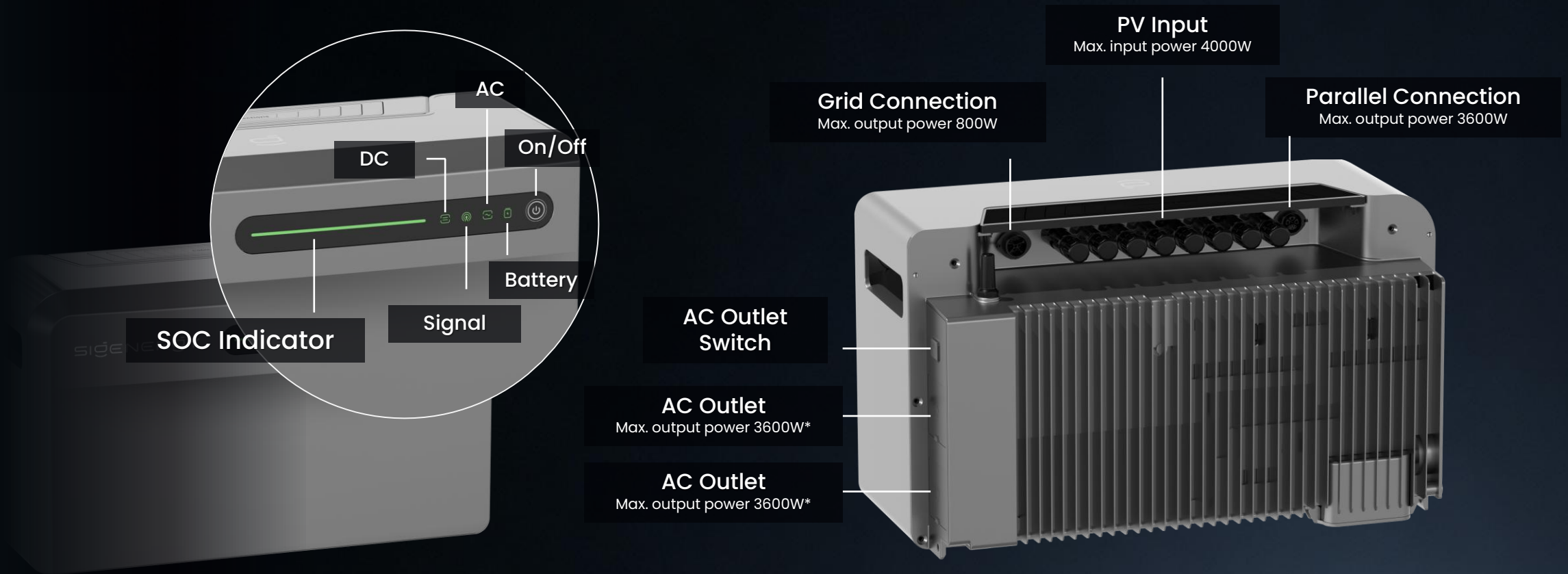
56.4 kWh
Max. parallel capacity

No extra box needed

VS

Vendor A: Requires an extra parallel kit

Understanding SigenMate: Lights & Ports



*Each port supports up to 3600W, with a combined total output of 3600W across both ports.

On-grid 2 AC Outlets. Unleash 3600W

2 AC Outlets

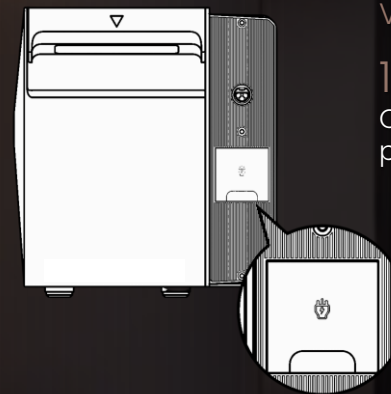
Supports two devices plugged in and powered at the same time.



Max. passthrough output power 3600W

Draw power simultaneously from both the battery and the grid.

VS



Vendor A:

1 AC outlets

Only one load can be powered at a time.

Vendor A:

2000W Max. passthrough output power

The maximum power for directly pluggable loads is only 2000W.

*SiGenMate has two AC outlets. Each port supports up to 3600W, with a combined total output of 3600W across both ports.

Retrofit 100% Compatible with Any Microinverters

- 1 Plug in any microinverters directly
Effectively controls microinverter power generation



Microinverter

- 3 Works both on-grid and off-grid
No solar waste, even off-grid.

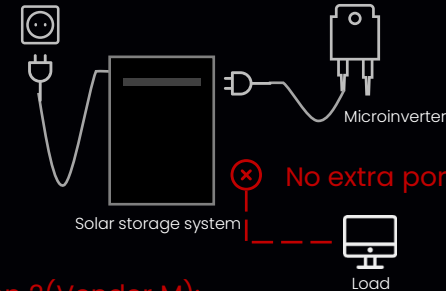


Load

- 2 Keeps critical loads running during retrofits
Uninterrupted power to critical loads during retrofits.

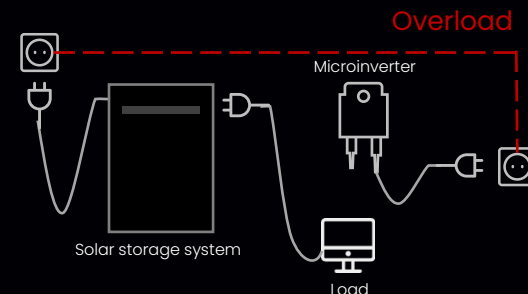
VS

- 1 Solution 1(Vendor A):
Only one AC outlet — no backup for loads during retrofits.



No extra ports available for critical loads

- 2 Solution 2(Vendor M):
Direct plug-in unavailable for third-party microinverters.
Lack of communication risks overload.



Off-grid Industry-Leading Backup Solution

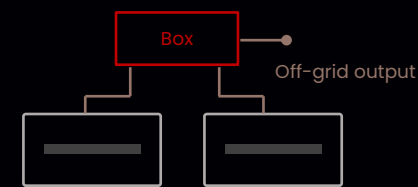
1 Truly Plug-and-Play: Connect 3, Get 3600W Off-Grid Power

Just connect up to 3 SigenMate units together.

- No extra boxes needed.
Easy to DIY



- Others: Requires an additional distribution box.



✗ Additional Cost: €299

✗ Make DIY Difficult

2 Seamless Grid-to-Backup Switching

When the power goes out, SigenMate kicks in seamlessly.

- Others: No seamless power backup during outages.

3 150% Peak Output Power

The startup power of many appliances greatly exceeds their rated power



Rated power: 500W
Max. Startup Power: 1500W

- ✓ Operate normally



- ✗ The load cannot start.



No extra boxes needed





Backup Time for Common Appliances



200W
27 Hours

Refrigerator



1000W
5 Hours

Small kettle



300W
18 Hours

Computer



300W
18 Hours

Household lighting



100W
54 Hours

Router



200W
27 Hours

TV



300W
18 Hours

Wash machine



800W
6.5 Hours

Micro waver

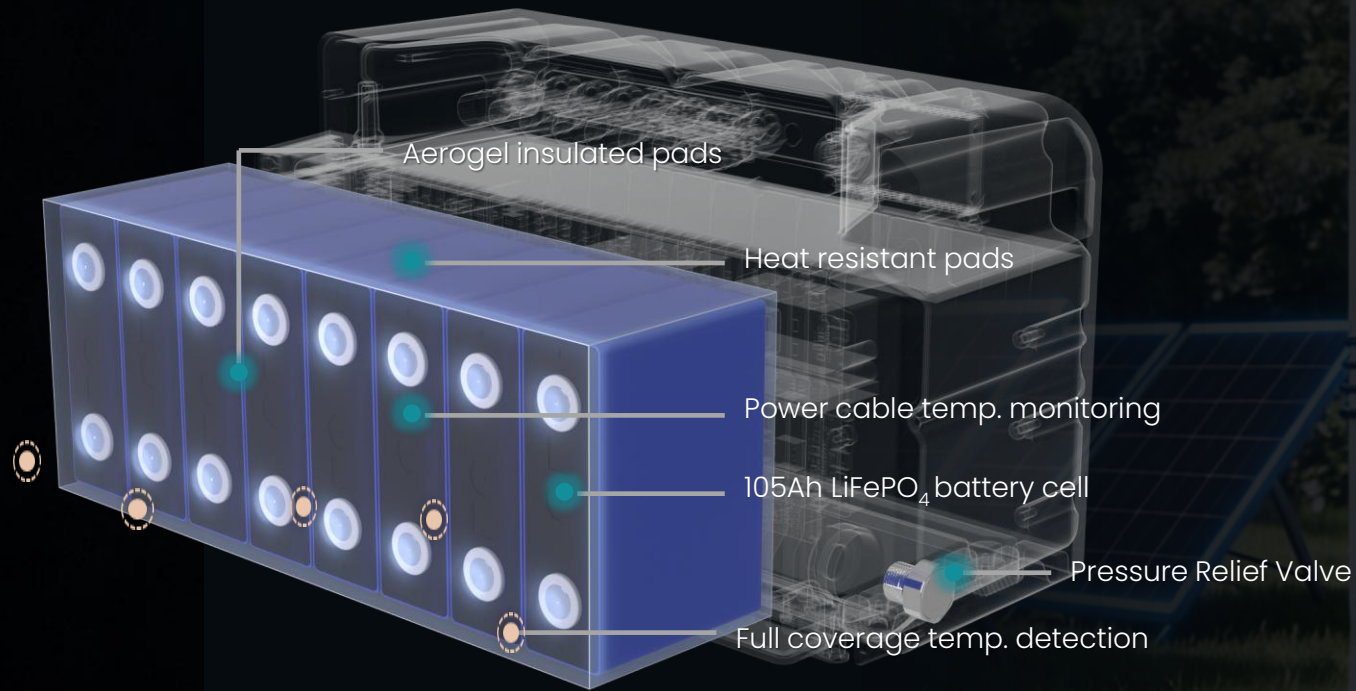


1000W
5 Hours

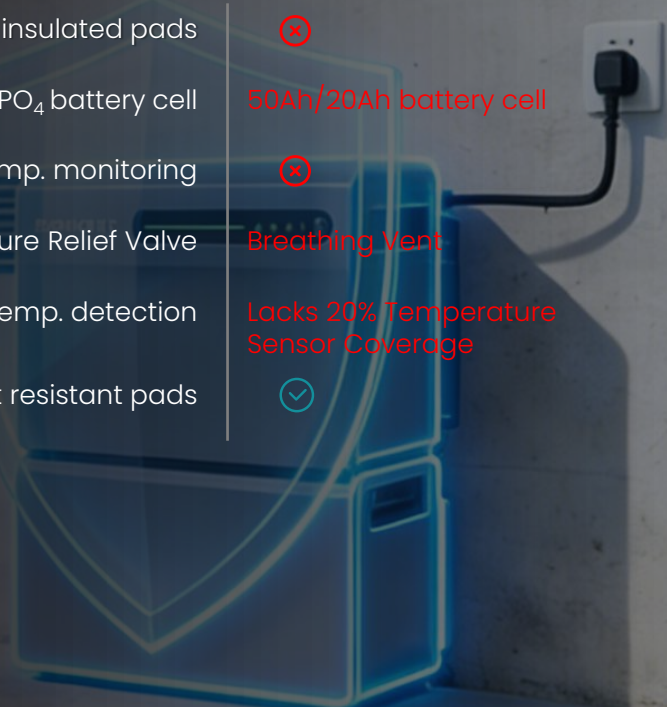
Heat pump

1. Backup time is based on 1 SigenMate EC 2700 + 1 SigenMate BAT 2700.
2. Backup loads need to be plugged into the AC Outlets .

Complete Protection. Total Peace of Mind.



SigenMate	Other Solution
Aerogel insulated pads	✗
105Ah LiFePO ₄ battery cell	50Ah/20Ah battery cell
Power cable temp. monitoring	✗
Pressure Relief Valve	Breathing Vent
Full coverage temp. detection	Lacks 20% Temperature Sensor Coverage
Heat resistant pads	✓





IP66 protection rating

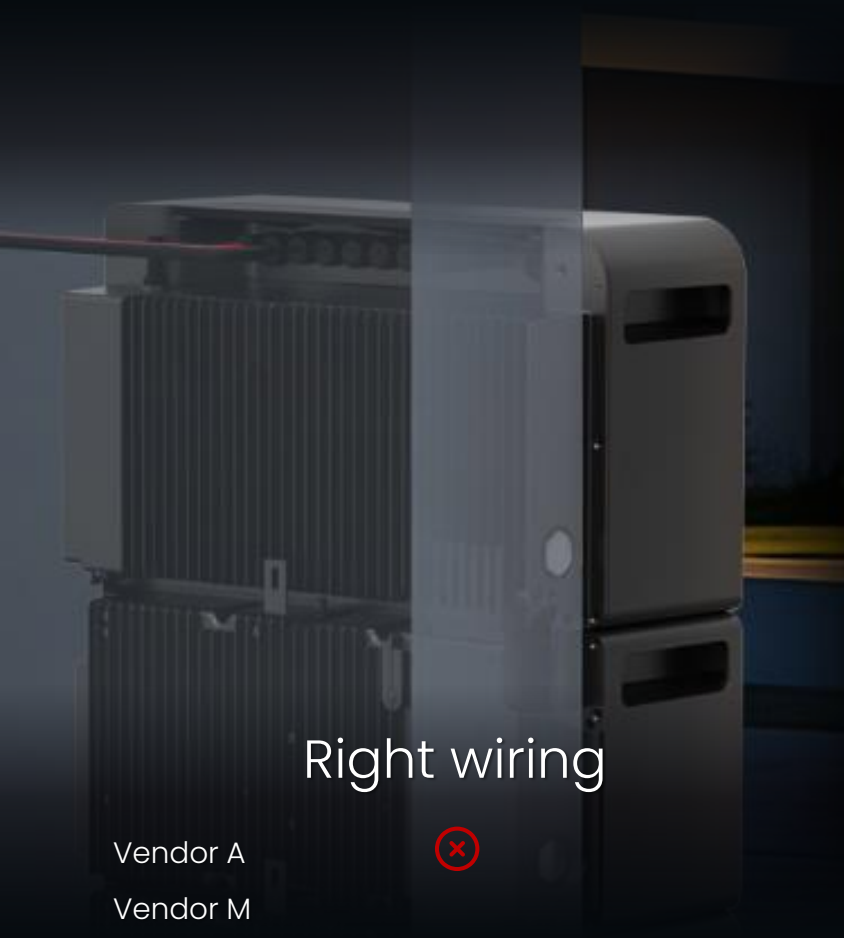
Fully sealed against dust and powerful water jets.
Tough enough for any weather.

Battery Heating Pad

Support scheduled heating.
Works reliably even in freezing winter.

Rear-wired for Any Corner

Cables Can Connect from Any Side. Route them left, right, or hidden from the back for a clean look.



Right wiring

Vendor A
Vendor M



Top wiring



Left wiring



Choose How You Use It

Need power anywhere outdoors?
Pair SigenMate with portable trolley for stable electricity on the go.



Need to add storage to your existing microinverter?
Pair it with SigenMate — the storage that works with any microinverter system.



Always Connected, Never Forgets.

■ Rock-Solid Connection

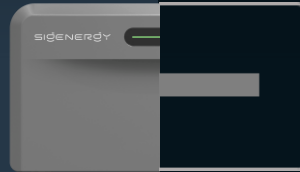
IEEE 802.11ax
2.4GHz / 5GHz

VS

IEEE802.11b/g/n
2.4GHz only

Smart Dual-Band
Switching

Auto. selects between
2.4GHz and 5GHz Wlan



Single Band, Prone
to Interference.

Smart home devices
Neighbor's Wi-Fi
Microwave ovens
...

2.4GHz

- ✓ Keeps SigenMate online reliably – even when your home Wi-Fi is crowded
- ✓ Maintains the most stable link – Real-time control
- ✓ Ensures the fastest connection – instant data loading

- ✗ Data packet loss – App shows “device offline”
- ✗ High network latency – slow command response
- ✗ Slow transfer speeds – lengthy data loading

■ 30-day Data Safehouse

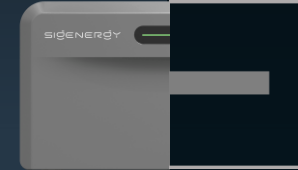
16 MB Flash

VS

4 MB Flash

30 Days

Ample Memory for
Unbroken 30-Day Logging.



Loss

Data loss risk
when offline.

Unstable Network
Outdoor Use

- ✓ Complete Data History – View seamless historical curves in the App
- ✓ Precise Troubleshooting – Enables accurate problem diagnosis for support



- ✗ History Can Be Lost – Critical performance data may disappear
- ✗ Blind Troubleshooting – Lacks sufficient data logs, making accurate remote diagnosis difficult

Track, predict, optimize with Sigen AI mode

By leveraging historical system data, weather data, and dynamic electricity pricing, Sigen AI Mode formulates the optimal energy strategy to ensure your lowest possible electricity bill.



Up to 17000+

Systems under Sigen AI Mode

NORD POOL

Tennet

eex

octopus
energy

And more...



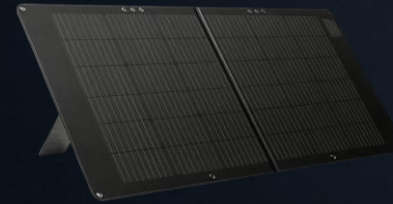
Available Add-Ons



SigenMate Portable Trolley



Sigen Solar Panel



Sigen Portable Panel



Sigen Power Sensor



SigenMate DC Y Connector



SigenMate AC Parallel Cable



SigenMate Plug Cable



SigenMate PV Cable

*Image for reference only. Final product may vary.

Start Your Smart Energy Journey



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