

FIAMM residential energy storage solutions are developed to provide energy independence by storing self-generated photovoltaic energy and to allow you to use when you need it. The RES2 is an all-in-one solution, based on FIAMM experience and designed for new installations or for retrofitting existing systems.

The range includes 7 models with different power and storage capacities to meet all needs:

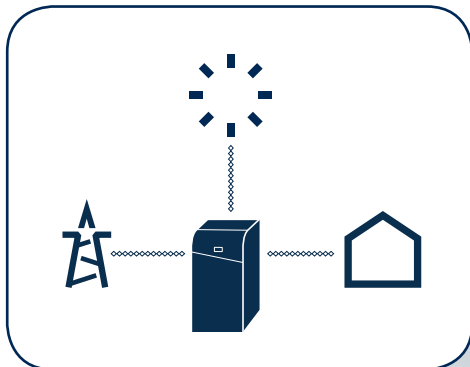
- All in One - Plug & Play
- Suitable for new and existing systems
- 100% recyclable
- Made in Italy
- Back up in event of a black out



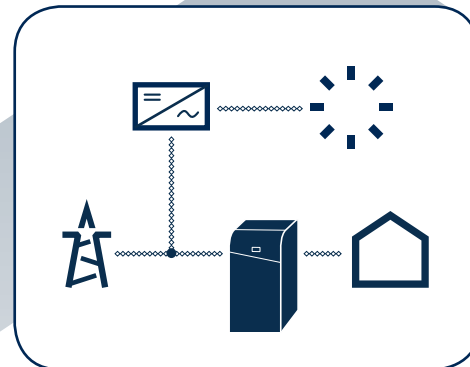
Characteristics

				Existing systems (retrofit)			New systems				
Unit				RES2 3R6	RES2 3R10	RES2 3R12	RES2 3N6	RES2 3N10	RES2 5N10	RES2 5N12	
PV Input Side	Input voltage range	V _{in,r}	V	/			55 - 200				
	Maximum input voltage (Voc)	V _{in,max}	V	/			200				
	Minimum input voltage (start)	V _{in,min}	V	/			55				
	Maximum current for each MPPT	I _{in,max}	A	/			26				
	Maximum power for each MPPT	P _{in,max}	W	/			2000				
	Maximum input power	P _{tot,max}	W	/			4000	6000			
	Number of independent MPPT*	N _{mpp}		/			2	3			
	PV cable connection			/			Tool-free connection box				
	Maximum Efficiency	P _{Ve}	%	/			97,6				
AC Side	Output Power	P _{out}	W	3000				5000			
	Nominal voltage	V _{out}	V	230							
	Voltage range	V _{out,r}	V	180 - 270							
	Nominal frequency	F _{out}	Hz	50							
	Nominal frequency range	F _{out,r}	Hz	47,5 ≤ f ≤ 51,5							
	Maximum current	I _{out,max}	A	13				22			
	AC/DC conversion efficiency	Eff	%	95							
	Self-consumption (stand-by)	P _{self,s}	W	< 10							
	Self-consumption (by-pass)	P _{self,b}	W	< 5							
	Topology	Type		Isolator transformer							
	AC auxiliary output (back-up)			Included							
	Nominal voltage auxiliary output	V _{nom,aux}	V	230							
	Maximum current auxiliary output	I _{max,aux}	A	13				22			
Switch time inverter/by-pass	T _{sw}	ms	10								
Operating temperature	T _{op}	°C	-10 / +50								

NEW SYSTEMS



EXISTING SYSTEMS



Characteristics

Unit

			Existing systems (retrofit)			New systems							
			RES2 3R6	RES2 3R10	RES2 3R12	RES2 3N6	RES2 3N10	RES2 5N10	RES2 5N12				
Battery Side	Maximum battery charge current	I _{batt,max}	A			35		32,5		50		65	
	Maximum battery charging power	P _{ac,max}	W			2000		1900		2900		3750	
	Battery pack nominal capacity (C10)	Cap, _{pack}	Wh			6240	9600	12480	6240	9600	9600	12480	
	Battery pack nominal voltage	V _{pack}	V			48							
	Single battery capacity	Ah, _{batt}	Ah			130	100	130	130	100		130	
	Number of batteries	N, _{batt}				4	8		4	8			
	Single battery nominal voltage	V _{batt}	V			12							
	Self-consumption (stand-by)	P _{out,b}	mA			10							
	Standard use / Back up battery SoC	SoC	%			50 / 70							
	Battery cable section	Ø cable	mm ²			35							
	Type of fuse	Fuse				CF Fuse; Mounting with battery clamp on battery pole							
	Number of fuse					1	2		1	2			
	Fuse current	I _{fuse}	A			125							
	Battery cable connection					FS17 cable 35 mm ² + Amphenol Surlok Plus 8.00 mm							
	Battery switch					Included							
Battery temperature sensor					Included								
Other	SPI (according to CEI 0-21)					Not included - external			Included (with programming cable)				
	Autotest (according to CEI 0-21)					External - relay test box			Programming cable + software				
	Dimensions		mm			600 x 640 x 1200							
	Weight		kg			~ 313	~ 449	~ 529	~ 323	~ 459	~ 462	~ 542	
	IP protection					IP21							
	Monitoring					Datalogger + APP + Website							
	User interface					On-board display + monitoring + programming cable							
	Meter					DIN module, max 100 m							
Certifications					CEI 0-21/2016:7, IEC/EN 62109-1, IEC/EN 62109-2, EN 61000-6-1, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, EN61000-3-11, EN61000-3-12								