



- ✓ Experts in Power Electronics
- ✓ Customized solutions
- ✓ Technology and innovation



Product Catalogue

EXPERTS IN ELECTRONICS OF



SUPSONIK S.L. is a leading company in the Power Electronics market that focuses its activity in the **Design, Manufacture and Commercialization of Industrial Power Electronics Equipment and Systems.**

EXPERIENCE We have more than 30 years of experience in the sector with a large number of equipment supplied **innovating technology, products** and services.

TECHNOLOGICAL CAPACITY AND INNOVATION. SUPSONIK has its own **R & D & i department**, which also has external technological partners. As a result, the new developments, studies and continuous research have allowed us to be in the market with products **of the latest technology** and high **QUALITY**, offering also **Engineering and Advisory Services** to our clients.

CUSTOM-BUILT EQUIPMENT This knowledge and experience in Engineering and Manufacturing give us flexibility and ability to **adapt any equipment or system to the needs of each client, application or project** complying with applicable regulations.

RECOGNITION We are satisfied of having an extensive list of clients and collaborators at both national and international level.

FIELDS OF APPLICATION SUPSONIK products and services have an application in the vast majority of electrical and electronic power systems of any sector among which we can mention:

- Renewable energies (wind, photovoltaic, fuel cells).
- Electricity sector: Generation and transport of electricity power.
- Industrial sector * Railway sector
- Military sector * Aeronautical sector
- Naval sector

INTERNATIONAL COVERAGE TECHNICAL ASSISTANCE SERVICE

We have a highly specialized technical team trained to carry out start-ups, repairs and maintenance with national and international coverage.

QUALITY Organization and management of the Company is governed by a **Quality Management System** based on the standard **UNE EN ISO 9001:2008** certified by LLOYD's Register.

ENVIRONMENT **Protection of the environment** is a fundamental premise in our company policy, being the respect and commitment to the preservation of the environment fully integrated in our processes.



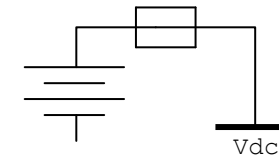
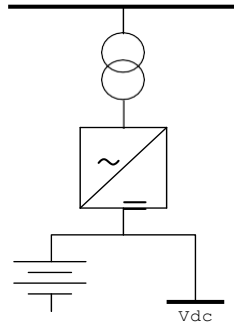
Equipment description	UPS / SAI	AC/DC/AC Converters
One-line diagram		
Fields of application	<ul style="list-style-type: none"> - Naval / military / rack series - Uninterrupted power supply systems (Hospitals, computer equipment, control centers, security, industrial processes, machine tools, offices, emergency lighting ...) 	<ul style="list-style-type: none"> - Safe power Supplies for Power Plants - Safe Supply Systems in industrial processes - Standard / naval / military series
Image		
Power Range	1 kW – 500 kW	1 kW – 1000 kW
Converter type	VSC	VSC
Technology	IGBTs	SCR, IGBTs
Input	Voltage	110/230/400/440/690 V
	Frequency	50/60 Hz
Output	Voltage	110/230/400/440/690 V
	Frequency	50/60/400 Hz

BATTERY RECTIFIERS / CHARGERS

Pb / Ni-Cd / SOLAR BATTERIES

Equipment description

One-line diagram



Fields of application

- Single-phase / three-phase rectifiers
- Battery chargers
- Power supplies.
- Electrolysis Processes
- Standard / naval / military series

- UPS, Rectifier, Inverter
- Lighting, Alarm Systems,
- Telecommunications
- Solar and Wind Energy Systems, Reserve Power

Image



Power Range

1 kW – 1000 kW

According to

Converter type

VSC

Technology

SCR, IGBTs

Pb – Ni-Cd – SOLAR

Input

Voltage

110/230/400/440/690 V

12/24/48/110/192/220/384 V

Frequency

50/60/400 Hz

=

Output

Voltage

12/24/48/110/220/500/1000 V

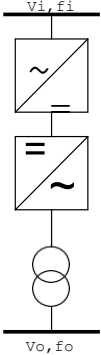
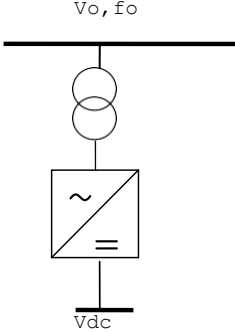


12/24/48/110/192/220/384 V

Frequency

=

=

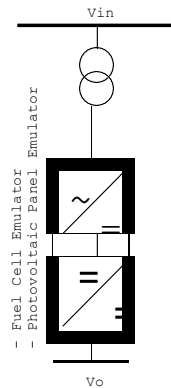
Equipment description	REDUNDANT AC/DC/AC CONVERTERS	REDUNDANT DC/AC CONVERTERS	FREQUENCY CONVERTERS
One-line diagram			
Fields of application	<ul style="list-style-type: none"> - Naval / military series - DC / DC conversion systems - Redundant Systems n + 1 - Systems of Power Adaptation (S.A.P.) 	<ul style="list-style-type: none"> - Naval / military series - DC/AC conversion systems - Redundant Systems n + 1 - Special Power Supply 400 Hz 	<ul style="list-style-type: none"> - Aeronautics, Naval, Military - Fout = 400Hz - Transformer coil heating for drying - Fout = 3Hz - Ozonizers - Fout = 400Hz
Image			
Power Range	55 / 110 / 330 / 500 kW (Other powers on request)	3 kW – 50 kW (Other powers on request)	5 kW – 2000 kW
Converter type	VSC	VSC	VSC
Technology	MOSFET , IGBT	MOSFET , IGBT	IGBTs
Input	Voltage	24 / 60 / 125 / 375 V	110/230/400/440/690 V
	Frequency	=	50/60 Hz
Output	Voltage	24 / 125 / 360 / 600 V	110/230/400/440/690 V
	Frequency	=	3/50/60/400 Hz

Equipment description		400HZ GPU CONVERTERS	28VCC GPU RECTIFIERS
Diagram			
Fields of application		<ul style="list-style-type: none"> - 400Hz GPU converters for aircraft ground supply - Airport / Hangars 	<ul style="list-style-type: none"> - 28Vcc GPU rectifiers for ground supply of regional aviation aircraft and helicopters. - Airport / Hangars
Image			
Power Range		60 / 90 / 120 / 180 kVA	28V @ 400A / 28V @ 600A
Converter type		VSC	---
Technology		IGBTs	THYRISTORS / DIODES
Input	Voltage	400V ac	400Vac, 200Vac
	Frequency	50/60 Hz	50/60Hz/400Hz
Output	Voltage	200 V	28 Vcc
	Frequency	400 Hz	=
		Other voltages on demand	Other voltages on demand

Equipment description	CONVERTERS FOR TEST BENCHES WITH RECOVERY OF ENERGY	SPEED VARIATORS WITH VECTOR CONTROL	
One-line diagram			
Fields of application	<ul style="list-style-type: none"> - Asynchronous Motor Testing - Synchronous Motor Testing - DC Motor Testing 	<ul style="list-style-type: none"> - Fuel Cell Simulation (AC / DC / DC) - S.A.P. Simulation (Power Adaptation System) (DC / DC) - Battery Simulation (DC / AC) 	
Image			
Power Range	100 / 600 / 1000 kW (Other powers on request)	55 / 110 / 330 / 500 kW (Other powers on request)	
Converter type	VSC		
Technology	IGBT		
Input	Voltage	400/440/690 V	400/440/690 V
	Frequency	50/60 Hz	50/60 Hz
Output	Voltage	400/440/690 V	400/440/690 V
	Frequency	50/60 Hz	0 ÷ 100 Hz (variable)

Equipment description

EMULATORS FUEL CELL / PHOTOVOLTAIC PANEL



One-line diagram

Fields of application

- Fuel Cell Simulation (AC / DC / DC)
- Photovoltaic Panel Simulation (AC / DC / DC)



Image

Power range

55 / 110 / 330 / 500 kW
other powers on request

Converter type

VSC

Technology

IGBT

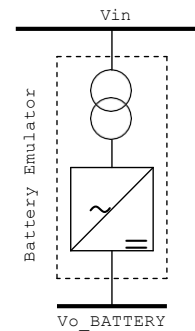
Input
Voltage
Frequency
Voltage

400/440 V
50/60 Hz
According to cell curve Programming of several Curves

Output

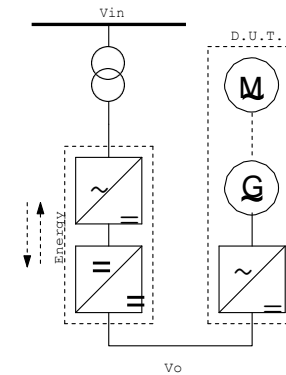
Different voltage ranges available

BATTERY EMULATOR S



- Battery Simulation (AC / DC)
- Re-generative DC Motor Tests

BIDIRECTIONAL AC/DC - DC/AC CONVERTERS



100kW – 1000 kW
(Other powers on request)

VSC

IGBT

400 / 600 / 690 V
50/60 Hz
0 – 250 – 750 – 1000 V
V / I programming

TEST BENCHES

Equipment description

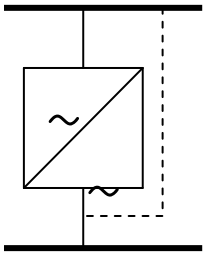
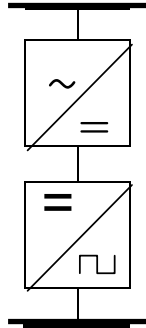


EMULATORS FUEL CELL / PHOTOVOLTAIC PANEL

BATTERY EMULATOR S

BIDIRECTIONAL AC/DC DC/AC CONVERTERS

One-line diagram			
Fields of application	<ul style="list-style-type: none"> - Fuel Cell Simulation (AC / DC / DC) - Photovoltaic Panel Simulation (AC / DC / DC) 	<ul style="list-style-type: none"> - Battery Simulation (AC / DC) - Re-generative DC Motor Tests 	
Image			
Power range	55 / 110 / 330 / 500 kW Other powers on request	55 / 110 / 330 / 500 kW (Other powers on request)	100kW – 1000 kW (Other powers on request)
Converter type	VSC	VSC	VSC
Technology	IGBT	IGBT	IGBT
Input	Voltage: 400/440 V Frequency: 50/60 Hz	Voltage: 400/440 V Frequency: 50/60 Hz	Voltage: 400 / 600 / 690 V Frequency: 50/60 Hz
Output	Voltage: According to cell curve Programming of several Curves Frequency: =	Voltage: Programmable Different voltage ranges available Frequency: =	Voltage: 0 – 250 – 750 – 1000 V V / I programming Frequency: =

Equipment description	PHOTOVOLTAIC INVERTERS	WIND GENERATORS
One-line diagram		
Fields of application	- Injection of Photovoltaic energy to the grid (Latest technology with Anti-gap and Anti-islanding system)	- Full Power Converter for Wind Turbines - Test Benches
Image		
Power Range	35 / 100 / 125 / 250 / 500 / 1100 kW (Other powers on request)	100 kW – 5000 kW (Other powers on request)
Converter type	VSC	VSC
Technology	IGBT	IGBT
Input	Voltage 430 – 850 – 1500 V Frequency =	690 V Variable
Output	Voltage 400 / 690 V Frequency 50/60 Hz	690 V 50/60 Hz

Equipment description	STABILIZERS / REDUCERS	BALLAST
One-line diagram		
Fields of application	<ul style="list-style-type: none"> - Reducers for energy saving in public lighting - Voltage stabilizers. 	<ul style="list-style-type: none"> - Lighting systems without Flickering (recording studios)
Image		
Power Range	3.3 - 150 kW (Modular design) Other powers on request	2.5 – 6 kW (Other powers on request)
Converter type	VSC	VSC
Technology	IGBT	IGBT
Input	Voltage 400 V + N	230 V
	Frequency 50 / 60 Hz	50 / 60 Hz
Output	Voltage 400 V + N	120, 240 V
	Frequency 50 / 60 Hz	120 Hz



Power Electronics

SUPSONIK, S.L.

C/ Torretxu Bidea nº 5 1ª plta
48150 Sondika – Vizcaya
SPAIN

Phone: +34
944532171
Fax: +34 944532192
Skype: SUPSONIK

info@supsonik.com
www.supsonik.com