

INDUSTRIAL
DC/AC INVERTERS

SHT-POWER
www.shtpower.com

**SPIX &
SWAV SERIES**
Power: 100W to 6300W

Industrial DC/AC inverter range with 24V /48V /110Vdc input and a power range from 650W to 6300W, characterized from high reliability, robust mechanical design and galvanic isolation for the most demanding environments.

The SWAV series converts a DC input voltage into a perfect sinusoidal single-phase output to provide power to critical AC loads. A wide input voltage range allows the possibility to accept different and not stabilized dc voltages without the need of a dc/dc converter:

24Vdc: 19Vdc - 43Vdc

48Vdc: 39Vdc - 80Vdc

110Vdc: 88Vdc - 145Vdc

The presence of 4000V galvanic isolation allows high safety to the load connected and more reliability to the units.

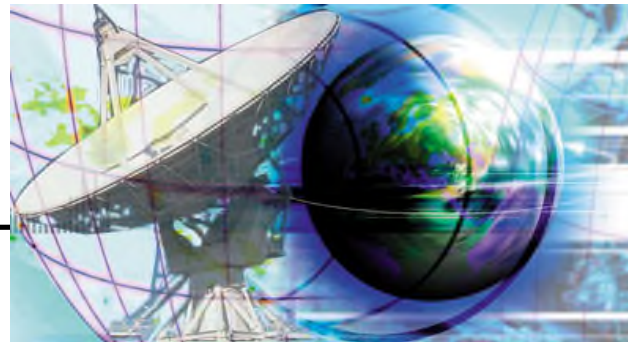


The SWAV systems are also the right answer for motion-systems thanks to their robust mechanics and the possibility to apply anti-shocking treatments.

In addition to standard layout in TOWER, RACK or WALL MOUNTED design, skilled technical staff and experienced engineers are able to follow dedicated projects with all kind of customization.

SPIX series has been projected with the same features and high reliability levels of the SWAV series; small and compact industrial inverters in rack 2U version with 48V or 110Vdc input voltage and 100W/300W power.

The right solution for telecommunication fields and critical industrial environments.



SHT-POWER

MAIN FEATURES

WIDE INPUT VOLTAGE RANGE

Wide input voltage range allows to connect any kind of voltages request:

24Vdc → 19-43Vdc

48Vdc → 39-70Vdc

110Vdc → 89-145Vdc

GALVANIC ISOLATION

Output toroidal transformer to provide 4000V galvanic isolation and total protection to the load.

LOW VOLTAGE ELECTRONIC

Key feature in order to safeguard dedicated personnel during unit functioning.

No high voltages into the electronic section.



MAIN FEATURES

UNIT MONITORING

LED on the frontal panel for easy functions monitoring.

Blue LCD display with V+I output details.

Remote free contacts to remote positioning control

SPECIAL MECHANICAL TREATMENTS

TROPICALIZATION

dedicated boards treatment to protect against high humidity and strong temperatures

VIBRATION

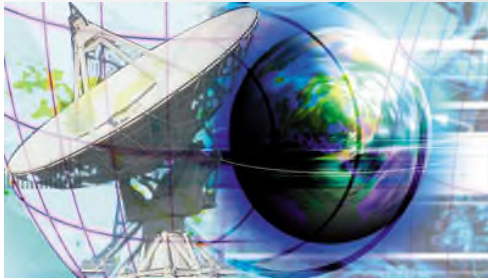
mechanical treatment with a very special fixing paste against vibrations

STATIC SWITCH BY-PASS on emergency line



APPLICATIONS

TELECOMMUNICATION MICROWAVE LINKS



TRANSPORTS



NAVY



INDUSTRY



AIRPORTS



SHT-POWER

VERSIONS

FLOOR DESIGN simple but elegant...

from 650W to 6300W power can be built inside a floor design,
with different input 24Vdc, 48Vdc and 110Vdc



WALL-MOUNTED DESIGN always very useful...

from 650W to 6300W power

Wall design to save space on the floor.

SHT-POWER

VERSIONS

COMPACT DESIGN industrial solution...

100W and 300W power

Compact industrial versions, high safety into really small dimensions



RACK DESIGN industrial solution...

from 650W to 6300W power

Industrial versions to be integrated into rack cabinet

SHT-POWER

GENERAL DATAS – SWAV 24V							
MODELES	TECHNICAL FEATURES	SWAV 24-3	SWAV 24-20	SWAV 24-25	SWAV 24-35	SWAV 24-40	SWAV 24-45
POWER	Output power A/W	525W	900W	1100W	1350W	1600W	1850W
	Output peak power	1000W	1600W	2000W	2200W	2600W	3000W
TECHNOLOGY	Inverter	Microprocessor PWM					
SIGNALS	Optic /Acoustic	Mains present, DC present, low DC, danger temperature, over temperature, overload/short circuit, by-pass functioning					
	Remote contacts	DB9 Standard board: DC present, low DC Option on request → DB9 Multi-contact board: on/off, DC present, low DC, danger temperature, inverter fault, overload/short circuit, by-pass functioning					
ENVIRONMENTAL CONDITIONS	Temperature	Working: 0°C to +45°C / Storage: -10°C to +60°C					
	Noise	<28dB	<30dB			<42dB	
MECHANICAL DETAILS	IP / Colour	IP20 / RAL 9006					
	Tower /Rack	155x383x 316h / 3U	243x585x482h / 4U (443+53mm)			355x782+53x378h / 5U (443+53mm)	
	Weight / Kg.	20	33	36	41	46	53

INPUT / OUTPUT DATAS – SWAVE 24V							
MODELES	TECHNICAL FEATURES	SWAV 24-3	SWAV 24-20	SWAV 24-25	SWAV 24-35	SWAV 24-40	SWAV 24-45
INPUT	Voltage range	19Vdc – 43Vdc					
	Connections	Terminal block under breakers or fuse					
OUTPUT	Voltage	230Vac single-phase					
	Frequency	50Hz +/-0,01%					
	Wave	Pure sine wave – microprocessor generated					
	Isolation	4000V galvanic isolation through toroidal transformer					
	Connections	Terminal Block					
	Electronic protection	Overload – Short circuit					
	Distortion	<5% Linear / <8% Non-linear					
	Voltage variation	<1% Static / +/-3% Dynamic					
BY-PASS	Emergency by-pass	Option – on request					

GENERAL DATAS – SWAV 48V												
MODELS	TECHNICAL FEATURES	SWAV 48-3		SWAV 48-15		SWAV 48-20	SWAV 48-25	SWAV 48-35	SWAV 48-40	SWAV 48-45	SWAV 48-60	SWAV 48-70
POWER	Output power A/W	3A / 650W	4A / 900W	5A / 1100W	6A / 1350W	7A / 1700W	9A / 2100W	11A / 2500W	15A / 3375W	18A / 4050W	22A / 4950W	27A / 6300W
	Output peak power	1000W	1400W	1800W	2200W	3000W	3200W	3500W	5000W	6000W	6800W	7500W
TECHNOLOGY	Inverter	Microprocessor PWM										
SIGNALLINGS	Optic /Acoustic	Mains present, DC present, low DC, danger temperature, over temperature, overload/short circuit, by-pass functioning										
	Remote contacts	DB9 Standard board: DC present, low DC Option on request → DB9 Multi-contact board: on/off, DC present, low DC, danger temperature, inverter fault, overload/short circuit, by-pass functioning										
ENVIRONMENTAL CONDITIONS	Temperature	Working: 0°C to +45°C / Storage: -10°C to +60°C										
	Noise	<28dB	<30dB			<42dB					30dB to 47dB	
MECHANICAL DETAILS	IP / Colour	IP20 / RAL 9006										
	Tower /Rack	155x383x316h/3U	243x585x482h / 4U (443+53mm)			243x585x482h / 4U (443+53mm)			355x782+53x378h / 5U (643+53mm)			
	Weight / Kg.	21	32	34	37	42	47	54	62	68	74	80

INPUT / OUTPUT DATAS – SWAV 48V												
MODELS	TECHNICAL FEATURES	SWAV 48-3	SWAV 48-15	SWAV 48-20	SWAV 48-25	SWAV 48-35	SWAV 48-40	SWAV 48-45	SINE 48-15	SWAV 48-60	SWAV 48-70	SWAV 48-90
INPUT	Voltage range	39/60Vdc	39/80Vdc									
	Connections	Terminal block under breakers or fuse										
OUTPUT	Voltage	230Vac single-phase										
	Frequency	50Hz +/-0,01%										
	Wave	Pure sine wave – microprocessor generated										
	Isolation	4000V galvanic isolation through toroidal transformer										
	Connections	Terminal Block										
	Electronic protection	Overload – Short circuit										
	Distortion	<5% Linear / <8% Non-linear										
	Voltage variation	<1% Static / +/-3% Dynamic										
BY-PASS	Emergency by-pass	Option – on request										

GENERAL DATAS – SWAV 110V

MODELS	TECHNICAL FEATURES	SWAV 110-3	SWAV 110-15	SWAV 110-20	SWAV 110-25	SWAV 110-35	SWAV 110-40	SWAV 110-45 110-50	SWAV 110-60	SWAV 110-70	SWAV 110-80	SWAV 110-	
POWER	Output power A/W	3A / 650W	4A / 900W	5A / 1100W	6A / 1350W	7A / 1700W	9A / 2100W	11A / 2500W 12A / 3000W	15A / 3375W	18A / 4050W	22A / 4950W	27A / 6300W	
	Output peak power	1000W	1400W	1800W	2200W	3000W	3200W	3500W/ 4000W	5000W	6000W	6800W	7500W	
TECHNOLOGY	Inverter	Microprocessor PWM											
SIGNALLINGS	Optic / Acoustic	Mains present, DC present, low DC, danger temperature, over temperature, overload/short circuit, by-pass functioning											
	Remote contacts	DB9 Standard board: DC present, low DC Option on request → DB9 Multi-contact board: on/off, DC present, low DC, danger temperature, inverter fault, overload/short circuit, by-pass functioning											
ENVIRONMENTAL CONDITIONS	Temperature	Working: 0°C to +45°C / Storage: -10°C to +60°C											
	Noise	<28dB	<30dB				<42dB				30dB to 47dB		
MECHANICAL DETAILS	IP / Colour	IP20 / RAL 9006											
	Tower /Rack version	155x383x316h/3U	243X585X482h / 4U (443+53mm)				243X585X482h / 5U (443+53mm)			355x782+53x378h / 5U (643+53mm)			
	Weight / Kg.	21	32	34	37	42	47	54/57	62	68	74	80	

INPUT / OUTPUT DATAS – SWAV 110V

MODELS	TECHNICAL FEATURES	SWAV 110-3	SWAV 110-15	SWAV 110-20	SWAV 110-25	SWAV 110-35	SWAV 110-40	SWAV 110-45 110-50	SWAV 110-60	SWAV 110-70	SWAV 110-80	SWAV 110-
INPUT	Voltage range	88 / 145Vdc										
	Connections	Terminal block under breakers or fuse										
OUTPUT	Voltage	230Vac single-phase										
	Frequency	50Hz +/-0,01%										
	Wave	Pure sine wave – microprocessor generated										
	Isolation	4000V galvanic isolation through toroidal transformer										
	Connections	Terminal Block										
	Electronic protection	Overload – Short circuit										
	Distortion	<5% Linear / <8% Non-linear										
	Voltage variation	<1% Static / +/-3% Dynamic										
BY-PASS	Emergency by-pass	Option – on request										

GENERAL DATAS – SPIX 48V e 110V

MODELS	TECHNICAL FEATURES	SPIX 48-100	SPIX 48-300	SPIX 110-100	SPIX 110-300
POWER	Output power A/W	0,43A / 100W	1,3A / 300W	0,43A / 100W	1,3A / 300W
	Output peak power	250W	600W	250W	600W
TECHNOLOGY	Inverter	Microprocessor PWM			
SIGNALLINGS	Optic / Acoustic	DC present, low DC, danger temperature, over temperature, overload/short circuit			
	Remote contacts	Two free contacts on terminals: DC present, DC low / Option on request → Multi-contact board on terminals: on/off, danger temperature, over temperature, overload/short circuit			
ENVIRONMENTAL CONDITIONS	Temperature	Working: 0°C to +60°C / Storage: -10°C to +60°C			
	Noise	<28dB			
MECHANICAL DETAILS	IP / Colour	IP20 / RAL 9006			
	Tower /Rack version	440x210x90h – 2U 480x210x90h			
	Weight / Kg.	7	9	7	9

INPUT / OUTPUT DATAS – SPIX 48V e 110V

INPUT / OUTPUT DATAS – SPIX 48V e 110V					
MODELS	TECHNICAL FEATURES	SPIX 48-100	SPIX 48-300	SPIX 110-100	SPIX 110-300
INPUT	Voltage range	39/70Vdc		89/145Vdc	
	Connections	Connector			
OUTPUT	Voltage	230Vac single-phase			
	Frequency	50Hz +/-0,01%			
	Wave	Pure sine wave – microprocessor generated			
	Isolation	4000V galvanic isolation through toroidal transformer			
	Connections	Nr. 2 output on connectors – nr. 1 Schuko socket			
	Electronic protection	Overload – Short circuit			
	Distortion	<5% Linear / <8% Non-linear			
	Voltage variation	<1% Static / +/-3% Dynamic			