

Serie SINE e MICRON

INVERTER

DC/AC INVERTER WITH 1PH OUTPUT

SINE series are industrial DC/AC inverters, available with **24Vdc**, **48Vdc** and **110Vdc** input voltages and with a power range from **650W** to **6300W**.

These products are designed to respond to the most critical requests, thanks to the high level of reliability, very robust mechanics and the galvanic isolation.



TOWER VERSION

Output power from **650W** to **6300W**

Input voltage:

24Vdc 48Vdc 110Vdc+



VERSION FOR WALL MOUNTING

Output power from **650W** to **6300W**

Version for wall mounting, designed to save space on the ground



MICRON VERSION

Output power from **100W** and **300W**

Compact industrial version, with high safety in very small dimensions



VERSION FOR RACK MOUNTING

Output power from **650W** to **6300W**

Industrial version for integration in industrial cabinet

The **SINE** series can be adopted to convert the DC input voltage into 1Ph AC output voltage with a perfect sine wave, suited for powering sensitive loads.

A wide input voltage range allows to accept many DC voltages, even if not stabilized, without installing a DC/DC converter:

24Vdc: from 19Vdc to 43Vdc

48Vdc: from 39Vdc to 80Vdc

110Vdc: from 88 to 145Vdc

The presence of the toroidal transformer on the output with 4000V of galvanic isolation guarantees high protection and safety for the connected load.

SINE models are also the right answer for moving systems thanks to their mechanical robustness and the possibility of applying specific anti-vibration treatments. In addition to the standard **TOWER**, **RACK** and **WALL** versions, it is possible to have products with special layouts according to the different needs of the Client, thanks to a specialized staff of mechanical engineers.

The **MICRON** series has been designed following the same characteristics and the same level of safety and reliability of the **SINE** series. In short, they are a small and compact industrial inverters available in 2U Rack version with 48Vdc or 110Vdc input voltages and 250W and 600W output power. They are the perfect solution for the telecommunications sector and for the critical industrial environments.

WIDE VOLTAGE INPUT RANGE

Very wide range of input voltage, allowing to install the inverter in every conditions:

24Vdc: from 19Vdc to 43Vdc

48Vdc: from 39Vdc to 80Vdc

110Vdc: from 88 to 145Vdc

GALVANIC INSULATION

Provided as standard with toroidal output transformer which guarantees 4000V of galvanic isolation and the total load protection.

LOW VOLTAGE ELECTRONICS

Key feature that allows to safeguard the personnel involved during the operation of the unit: no high voltage is present inside the electronic section.

APPLICATIONS

- Telecommunication
- Transportations
- Naval
- Industry
- Airports

GENERAL DATA – SINE 24V

MODEL	DATA	SINE 24-3	SINE 24-4	SINE 24-5	SINE 24-6	SINE 24-7	SINE 24-8
POWER	OUTPUT POWER	525W	900W	1100W	1350W	1600W	1850W
	OUTPUT STARTING SURGE	1000W	1600W	2000W	2200W	2600W	3000W
TECHNOLOGY	INVERTER	PWM Microprocessor					
SIGNALS	OPTIC / ACOUSTIC	Mains present, DC present, low DC, critical temperature, overtemperature, overload/short circuit, by-pass operation					
	REMOTE CONTACTS	DB9 standard card: DC present, low DC Optional multi-contacts DB9 card: on/off, DC present, DC low, critical temperature, inverter fault, overload/short circuit, by-pass operation					
AMBIENT	OPERATING TEMPERATURE	0°C a +45°C / Stock: -10°C a +60°C					
	NOISE LEVEL	<28dB	<30dB			<42dB	
MECHANICAL DETAILS	PROTECTION DEGREE / COLOR	IP20 / RAL 9006					
	TOWER / RACK	155x383x316h/3U	243x585x482h / 4U (443+53mm)			355x782+53x378h / 5U (443+53mm)	
	WEIGHT / KG.	20	33	36	41	46	53

INPUT / OUTPUT DATA – SINE 24V

MODEL	DATA	SINE 24-3	SINE 24-4	SINE 24-5	SINE 24-6	SINE 24-7	SINE 24-8
INPUT	VOLTAGE RANGE	19Vdc – 43Vdc					
	CONNECTION	Terminal block with automatic or fuses					
OUTPUT	VOLTAGE	230Vac single-phase					
	FREQUENCY	50Hz +/-0,01%					
	WAVE SHAPE	Pure sine wave generated by the microprocessor					
	INSULATION	4000V of galvanic isolation through a toroidal transformer					
	CONNECTION	Terminal block					
	ELECTRONIC PROTECTION	Overload – Short circuit					
	DISTORTION	<5% linear / <8% Not linear					
BY-PASS	VOLTAGE VARIATION	<1% Static / +/-3% Dynamic					
	EMERGENCY BY-PASS	Optional - upon request					
DISPLAY	LCD DISPLAY	Optional - upon request					

GENERAL DATA – SINE 48V

MODEL	DATA	SINE 48-3	SINE 48-4	SINE 48-5	SINE 48-6	SINE 48-7	SINE 48-9	SINE 48-11	SINE 48-15	SINE 48-18	SINE 48-22	SINE 48-27		
POWER	CURRENT/OUTPUT POWER	3A / 650W	4A / 900W	5A / 1100W	6A / 1350W	7A / 1700W	9A / 2100W	11A / 2500W	15A / 3375W	18A / 4050W	22A / 4950W	27A / 6300W		
	OUTPUT STARTING SURGE	1000W	1400W	1800W	2200W	3000W	3200W	3500W	5000W	6000W	6800W	7500W		
TECHNOLOGY	INVERTER	PWM Microprocessor												
SIGNALS	OPTIC / ACOUSTIC	Mains present, DC present, DC low, critical temperature, overtemperature, overload/short circuit, by-pass operation												
	REMOTE CONTACTS	Options on request: DB9 Multi-contacts card: on/off, DCpresent, DC low, critical temperature, inverter failure, overload/short circuit, by-pass function Standard DB9 card: DCpresent, DC low												
AMBIENT	OPERATING TEMPERATURE	0°C to +45°C / Stock: -10°C to +60°C												
	NOISE LEVEL	<28dB	<30dB				<42dB				30dB a 47dB			
MECHANICAL DETAILS	PROTECTION DEGREE / COLOR	IP20 / RAL 9006												
	TOWER / RACK	155 x 383 x 316h/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 DATA – SINE 48V

MODEL	DATA	SINE 48-3	SINE 48-4	SINE 48-5	SINE 48-6	SINE 48-7	SINE 48-9	SINE 48-11	SINE 48-15	SINE 48-18	SINE 48-22	SINE 48-27
INPUT	VOLTAGE RANGE	39 / 60Vdc	39/80Vdc									
	CONNECTION	Terminal block with automatic or fuses										
OUTPUT	VOLTAGE	230Vac single-phase										
	FREQUENCY	50Hz +/-0,01%										
	WAVE SHAPE	Pure sine wave generated by the microprocessor										
	INSULATION	4000V of galvanic isolation through a toroidal transformer										
	CONNECTION	Terminal block										
	ELECTRONIC PROTECTIONS	Overload – Short circuit										
	DISTORTION	<5% linear / <8% Not linear										
BY-PASS	VOLTAGE VARIATION	<1% Static / +/-3% Dynamic										
	EMERGENCY BY-PASS	Optional - upon request										
DISPLAY	LCD DISPLAY	Optional - upon request										

GENERAL DATA – SINE 110V

MODEL	DATA	SINE 110-3	SINE 110-4	SINE 110-5	SINE 110-6	SINE 110-7	SINE 110-9	SINE 110-11	SINE 110-12	SINE 110-15	SINE 110-18	SINE 110-22	SINE 110-27		
POWER	CURRENT/ OUTPUT POWER	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 STARTING SURGE	1000W	1400W	1800W	2200W	3000W	3200W	3500W	4000W	5000W	6000W	6800W	7500W		
TECHNOLOGY	INVERTER	PWM Microprocessor													
SIGNALS	OPTIC / ACOUSTIC	Rete presente, DCpresent, DC low, critical temperature, overtemperature, overload/short circuit, by-pass function													
	REMOTE CONTACTS	Options on request: Multi-contacts						Standard DB9 card: DCpresent, DC low DB9 card: on/off, DCpresent, DC low, critical temperature, inverter failure, overload/short circuit, by-pass function							
AMBIENT	OPERATING TEMPERATURE	0°C to +45°C / Stock: -10°C to +60°C													
	NOISE LEVEL	<28dB	<30dB				<42dB					30dB a 47dB			
MECHANICAL DETAILS	PROTECTION DEGREE / CO-LOR	IP20 / RAL 9006													
	TOWER /RACK	155 x 383 x 316h/3U	243x585x482h / 4U (443+53mm)				243x585x482h / 5U (443+53mm)				355x782+53x378h / 5U (643+53mm))				
	WEIGHT / KG.	19	30	32	35	40	45	50	55	62	66	72	78		

INPUT / OUTPUT DATA – SINE 110V

MODEL	DATA	SINE 110-3	SINE 110-4	SINE 110-5	SINE 110-6	SINE 110-7	SINE 110-9	SINE 110-11	SINE 110-12	SINE 110-15	SINE 110-18	SINE 110-22	SINE 110-27
INPUT	VOLTAGE RANGE	88-145Vdc											
	CONNECTION	Terminal block with automatic or fuses											
OUTPUT	VOLTAGE	230Vac single-phase											
	FREQUENCY	50Hz +/-0,01%											
	WAVE SHAPE	Pure sine wave generated by the microprocessor											
	INSULATION	4000V of galvanic isolation through a toroidal transformer											
	CONNECTION	Terminal block											
	ELECTRONIC PROTECTIONS	Overload – Short circuit											
	DISTORTION	<5% linear / <8% Not linear											
	VOLTAGE VARIATION	<1% Static / +/-3% Dynamic											
BY-PASS	EMERGENCY BY-PASS	Optional - upon request											
DISPLAY	LCD DISPLAY	Optional - upon request											

GENERAL DATA – MICRON 48V and 110V

MODEL	DATA	MICRON 48-04	MICRON 48-1	MICRON 110-04	MICRON 110-1
POWER	CURRENT/ OUTPUT POWER	0,43A / 100W	1,3A / 300W	1,3A / 300W	1,3A / 300W
	OUTPUT STAR- TING SURGE	250W	600W	250W	600W
TECHNOLOGY	INVERTER	PWM Microprocessor			
SIGNALS	OPTIC / ACOUSTIC	DCpresent, DC low, critical temperature, overtemperature, overload/short circuit			
	REMOTE CONTACTS	Standard DB9 card: DCpresent, DC low Options on request: Multi-contacts card on terminali: on/off, critical temperature, overtemperature, overload/short circuit			
AMBIENT	OPERATING TEMPERATURE	0°C a +45°C / Stock: -10°C a +60°C			
	NOISE LEVEL	<28dB			
MECHANICAL DETAILS	PROTECTION DEGREE / CO- LOR	IP20 / RAL 9006			
	TOWER /RACK	440x210x90h – 2U 480x210x90h			
	WEIGHT / KG.	7	9	7	9

INPUT / OUTPUT DATA – MICRON 48V and 110V

MODEL	DATA	MICRON 48-04	MICRON 48-1	MICRON 110-04	MICRON 110-1
INPUT	VOLTAGE RANGE	39/70Vdc		89/145Vdc	
	CONNECTION	Connector			
OUTPUT	VOLTAGE	230Vac single-phase			
	FREQUENCY	50Hz +/-0,01%			
	WAVE SHAPE	Pure sine wave generated by the microprocessor			
	INSULATION	4000V of galvanic isolation through a toroidal transformer			
	CONNECTION	Nr. 2 outputs on connectors - nr. 1 Schuko socket			
	ELECTRONIC PROTECTIONS	Overload – Short circuit			
	DISTORTION	<5% linear / <8% Not linear			
	VOLTAGE VARIATION	<1% Static / +/-3% Dynamic			
DISPLAY	LCD DISPLAY	Optional - upon request			



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