

# Ray-Max<sup>™</sup> INVERTER

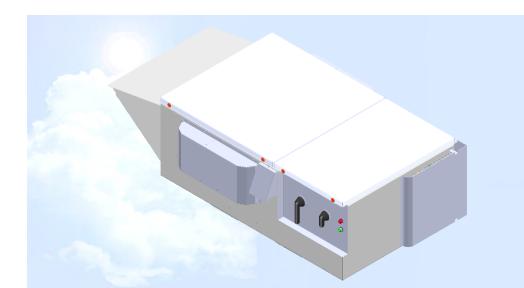
### **Features**

- Low profile cabinet
- Full power up to 45°C
- Sealed electrical compartments
- Best in class >98% peak efficiency
- CEC listed
- 1000 V DC system compatible
- Bottom and side cable entry
- Compatible with all PV modules
- Advanced cooling
- MPPT range of 240 850 volts
- Load break rated AC and DC service disconnects
- Modular design for ease of maintenance and service

## **Contact Nextronex:**

Phone: 419-838-7889

Email: info@nextronex.com



The Ray-Max Inverter is a state-of-the-art 150kW transformer-less inverter based on 30 years of experience powering industry around the world. Operating with DC string voltages up to 1000 V DC, the Ray-Max Inverter provides maximum energy production with best in class efficiency. Additional benefits include reduced power loss in wiring and up to 26% savings in installation cost. With the highest MPPT voltage window in the industry, the Ray-Max Inverter provides exceptional versatility.

The Ray-Max Inverter operates at full power up to 45°C using advanced heat transfer techniques (no liquids), making it the perfect solution for placement in an array, on a roof, or in an equipment room. All electronic components are sealed against atmospheric contamination and moisture ingress providing reliable performance in any environmental condition.

The Ray-Max Inverter is certified to UL 1741/ IEEE 1547 for both the US and Canada, and is a CEC eligible component.

The highly reliable design is self-protected against all forms of overheating and overcurrent. If service is necessary during it's lifetime, all active components are mounted on a chassis that can be removed and replaced in 30 minutes when required.

When used in a stand-alone application, the Ray-Max Inverter will manage it's MPPT to maximize energy harvesting and ensure grid interconnect safety functions. When used in the Nextronex Ray-Max System\*, the inverter accepts commands from the Smart Controller to become active and it's status of master or slave. In master mode, the inverter manages the MPPT function for the entire array, communicating to the controller when additional capacity is needed from other inverters in the system to harvest available energy.

\*The Nextronex Ray-Max System is a complete kit of components for solar array wiring requirements. The system is modular and is designed for applications from 100kW to 1.5mW (larger arrays are simply multiples of this). Above 100kW, where multiple inverters are used, the Ray-Max system uses a proprietary distributed architecture that is patent protected. This package offers the lowest cost, highest energy harvesting, and best long term reliability available in the industry.



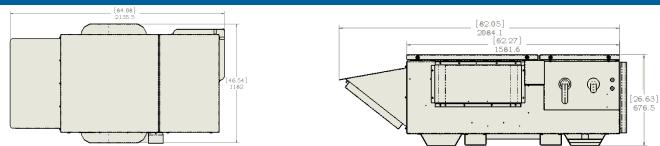
#### www.nextronex.com

harvesting the power of light  $^{^{^{^{^{^{^{^{^{*}}}}}}}}$ 

1510 N. Westwood Avenue Toledo, OH 43606 Patent Pending

P 419.838.7889 F 419.838.7888

# **RAY-MAX INVERTER**



SPECIFICATIONS		
INPUT		
	Maximum Array Input Voltage	1000VDC or 600VDC
	Input Voltage Range for MPPT (1000V)	350 - 850 VDC
	Input Voltage Range for MPPT (600V)	240 - 500 VDC
	Maximum DC input current	240 A
OUTPU	т	
	Output Voltage Range (line to line)	208 - 480 V AC
	Nominal Output Voltage	360 V AC, 3 Phase
	Output Frequency Range	50 Hz, 60 Hz (+/- 1%)
	Maximum Output Current per Phase	240 Amp
	Maximum Overcurrent Protection per Phase	350 Amp
	Peak Efficiency (transformerless)	98.97%
	CEC Weighted Efficiency with transformer	95% / 95.8%
	Power Factor at Full Load	0.99
	Harmonic Distortion	< 3%
ENVIRO	DNMENTAL	
	Operating Ambient Temperature Range	-25°C to +45°C (full power)
	Storage Temperature Range	-30°C to +70°C
	Cooling	Forced Air
	Noise Level	< 65 dBA
ENCLO	SURE	
	Туре	NEMA 3R
	Material	14 gauge steel
	Finish	Gloss white powder coat
	Weight	426 KG / 939 LBS
AGENCY LISTINGS		
	UL 1741 - Safety standard for Inverters, Converters, Controllers and Interconnection System Equipment For Use With Distributed Energy Resources"	
	IEEE 1547 - Standard for Interconnecting Distributed Resources with Electric Power Systems	
	CSA C22.2 No. 107.1-01 - General Use Power Supplies	
	CEC Listed	



harvesting the power of  $\mathsf{light}^{\mathsf{TM}}$ 

1510 N. Westwood Avenue Toledo, OH 43606