E-FORCE® SOLAR INVERTERS

Magnetek's E-Force Inverters are designed for grid-tied large solar applications such as ground mount installations. E-Force offers two Maximum Power Point Tracking (MPPT) algorithms that maximize energy produced under varying light conditions. Magnetek's unique switching technology includes large capacity Insulated Gate Bi-polar Transistors (IGBTs) to improve service life. E-Force is designed to increase the electrical power that is available from renewable sources, reduce the time and cost of installation and ensure long service life. Magnetek can provide complete balance of system solutions, integrating medium voltage switchgear and a variety of E-House™ Enclosure options.

BENEFITS

- Over 97% efficient
- Unity power factor standard
- Less than 5% total current distortion
- Dual MPPT
- NEMA 1 enclosure
- UL 1741 (approval pending)
- Compact size and high power density

OPTIONS

- Self diagnostics available for remote monitoring
- Grid support options
  - LVRT
  - VAR Control (adjustable from 95% lead to 95% lag)
- Human-machine interface (HMI)
- Utility-grade power meter
- PV string isolation switch with visible disconnect (standard for Ontario shipments)

Magnetek's E-Force design means high availability for our customers allowing them to harvest more green.

E-HOUSE™ ENCLOSURES

Magnetek's durable E-House™ Enclosures are designed to withstand local conditions, whether it's snow load or desert heat, delivering long system life. Our modular enclosures are designed for quick, easy installation, minimizing field wiring and balance of system costs.

FEATURES

- Fully insulated (multiple R values available)
- Structures comply with local code requirements
- Constructed to meet road-legal size
- Pre-wired for rapid deployment and field installation

OPTIONS

- Inverter-only enclosures
- Inverter and step up transformer (15Kv to 34.5Kv)
- Inverter, transformer and protective switchgear (15Kv to 34.5Kv)

E-FORCE PV-1000 RATINGS

Input	DC Input/MPPT Range (V)	450 to 850VDC
	Input DC Current	2302A
	Maximum DC Input Rating	950VDC
	Array Connections	12x400A or 16x350A standard
Array	Positive Ground	Optional
	Negative Ground	Standard
	Floating	N/A
Output	Continuous Power (kW)	1000kW
	AC Output (V)	265V ±10%
	Output Current (Nom.)	2178A
	Output Current (Max)	2396A
	Power Factor	±95% lead/lag unity adjustable
	Harmonic Distortion	<5%
	Transformer	No
	THD Rating	IEEE519
Enclosure	NEMA Enclosure Rating	NEMA 1
	Dimensions (HxWxD)	180.11"x94.38"x32.16"
	Cooling Method	Forced Air
	Weight (lbs)	8,500
	Seismic Rating	Zone 4 (design)
	Temp Range °C (operating)	-20 to 50°C
	Humidity (operating)	0-95% Non-condensing
Features	CEC Efficiency (%)	*97%
	Peak Efficiency (%)	*97.7%
	Standard Warranty	5 Year
	Extended Warranty	Optional
	Uptime Guarantee	Optional
	UL1741, IEE1547.1	Pending
	Data Monitoring	Yes
	Local Display	Optional
Utility Support Features	Low Voltage Ride Through	Optional
	Zero Voltage Ride Through	Optional
	Active VAR Control (PF range noted above)	Standard

* Initial test data to be certified during agency testing

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Pub No. E-FORCE_SOLAR