

Magnetek's PVI-CENTRAL-250/250-TL grid-tied systems are designed for large solar applications such as "big box" retail, office buildings, industrial facilities or ground mount installations. Harvest more green with Aurora's Maximum Power Point Tracking (MPPT) algorithm that maximizes energy produced under varying light conditions. The inverter's Insulated Gate Bi-polar Transistors (IGBTs) reduce thermal energy losses for optimum performance.

These commercial-grade inverters feature scalability in a common-enclosure package that is delivered pre-configured and pre-tested. In addition to reducing on-site installation wiring and testing, this industry-leading technology provides cost-effective solutions with smaller footprints and increased reliability.

Applications flexibility is further enhanced by the availability of models with and without isolation transformers that are self contained within the inverter rack.

The development of the PVI-250/250-TL was in response to the rapidly growing global demand for environmentally friendly power sources. Magnetek's inverters deliver a unique combination of efficiency, flexibility and redundancy to the renewable energy market, demonstrating our ongoing commitment to world-class energy solutions.

Maximize power harvest

- High conversion efficiency (CEC efficiency 96%) for maximum power harvest
- Wide operating voltage range of 330-600 Vdc increases energy collected
- Self-tuning MPPT power curve optimizes energy harvest
- Multiple input MPPT through modular design for array efficiency

Flexible configuration

- Independent modules are configurable in multi-master mode or master-slave mode, providing power redundancy
- Optional module grounding of (+) leg for application flexibility

Low installation and maintenance costs

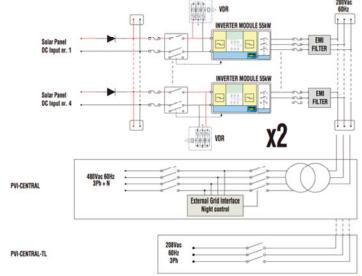
- Module design offers unobstructed front access to modules and power boards for quick inverter installs and simplified maintenance
- Reduced wiring for ease of installation
- Hot-swappable module replacement simplifies maintenance

Extended performance

- A broad range of communications options: dial up, ISDN, Ethernet, DSL, GSM, and the optional FlyBy Communication System hardware/software, for instant access to system status
- Reduced sensitivity to a single fault; in case of a component fault, the system continues operating derated to 200kW
- Five-year warranty extendable to 20 years

HARVEST MORE GREEN™

BLOCK DIAGRAM 100kW - 250kW



Maximum recommended PV power (KWp), Total master store does \$7.50			
Maximum recommended PV power (KWp), Total master store does \$7.50	CHARACTERISTICS	PVI-CENTRAL-250 w/transformer	PVI-CENTRAL-250-TL w/o transformer
Absolute maximum input voltage (Vdc)	Input Parameters		
	Maximum recommended PV power (kWp), Total (master slave mode) Per Channel (multi-master mode)	287.50 57.50	287.50 57.50
Mary Imput vallongs range Vdc 330-600(400 nominal) 330-600(400 nominal) 330-600(400 nominal) 757	Absolute maximum input voltage (Vdc)	600	600
Maximum input current (Adc), Nester-slove mode 757 757 757 151		***	***
Imput Reflected Ripple voltage <3% <3%			
Number of DC inputs evailable (multi-moster configuration)		< 3%	< 3%
Input overvollage protections		4	4
Durput Parameters Durput Parameters Durput Parameters Durput Parameters Durput Current (Arms) 260 26		4 (1 of each input)	4 (1 of each input)
Nominal AC Output Power (kW) 260 260		T (T O O O O O O O O O O O O O O O O O	T T T T T T T T T T T T T T T T T T T
Nominal AC Output (urrent (Arms) 694 894		260	260
Nominal AC Frequency (Hz) 50 / 60 50 / 60	Nominal AC Output Current (Arms) 208Vac Version 480Vac Version	694	694
Current Harmonics (THD%)	AC Output Voltage range (Vrms)	3 x 208 +/-10% or 3x480 +/-10%	3 x 208+/-10%
AC Current Hormonics (THD%) < 3% (@ Pac nominal) < 3% (@ Pac nominal)	Nominal AC Frequency (Hz)	50 / 60	50 / 60
Newter Switching Frequency (kHz) 18	Power Factor	1 (@ Pac nominal)	1 (@ Pac nominal)
AC side overvoltage protection Yes Yes	AC Current Harmonics (THD%)	< 3% (@ Pac nominal)	< 3% (@ Pac nominal)
Conversion Efficiency Color Post Pos	nverter Switching Frequency (kHz)	18	18
Peak Efficiency % (@ Vin nom) 96.3% 97.42% CEC Efficiency % (@ Vin nom) 208 96% 96% CEC Efficiency % (@ Vin nom) 480 96% N/A Environmental Parameters Environmental Protection Degree NEMA 2/NEMA 3R NEMA 2/NEMA 3R Operating Temperature Range 10°C+50°C 10°C+50°C Relative Humidity (non-condending) < 95% < 95% Seneral Data Voltages Consumption (W) <0.2% of PACnom <0.2% of PACnom <0.2% of PACnom Voltages Consumption (W) <0.2% of PACnom On The PACNOM ON THE OFTICLE	AC side overvoltage protection	Yes	Yes
Peak Efficiency % (② Vin nom) CEC Efficiency % (② Vin nom) 208 96% 96% N/A Environmental Protection Degree NEMA 2/NEMA 3R Operating Temperature Range -10°C+50°C -10°C+50°C -10°C+50°C Relative Humidity (non-condending) -95% Seneral Data 40W 40W 40W 40W Local Communication 1x RS485 + 1x RS485 (dedicated to String combiner-Box) Nemote Communication (optional) Aurora Easy Control (Dial-Up, ISDN, Ethernet, DSL, GSM) Mechanical Characteristics Dimensions (WxHxD) (mm) (**) Unique Air conduit not included 1250 x 2100(*) x 810/49.2"x82.6"x31.8" 1250 x 2100(*) x 810/49.2"x82.6"x31.8" 1250 x 1200/2640 780/1716 55KW module Weight (kg) 65/143 Required Ambient Air Cooling Flow 4porovals EMC FCC part 15	Conversion Efficiency		
SEC Efficiency (@ Vin nom) 208 96% 96% N/A		96.3%	97.42%
CEC Efficiency % (@ Vin nom) 480 Power of the protection Degree NEMA 2/NEMA 3R			
Environmental Parameters Environmental Protection Degree NEMA 2/NEMA 3R NEMA 2/NEMA 3R Departing Temperature Range -10°C+50°C -10°C+50°C -95% General Data Auxiliary Voltages Consumption (W) <0.2% of PACnom <0.2% of PACnom <0.2% of PACnom <0.2% of PACnom Value Va			
Environmental Protection Degree NEMA 2/NEMA 3R 10°C+50°C 40W 440W		77.7	.,,
Operating Temperature Range -10°C+50°C -10°C+50°C -95% Relative Humidity (non-condending) < 95% < 95% General Data Auxiliary Voltages Consumption (W) <0.2% of PACnom <0.2% of PACno		NEMA 2/NEMA 3R	NEMA 2/NEMA 3R
Relative Humidity (non-condending) General Data Auxiliary Voltages Consumption (W) Auxiliary Control (Dial-Up, ISDN, Ethernet, DSL, GSM) Aurora Easy Control (Dial-U			
General Data Auxiliary Voltages Consumption (W) Co.2% of PACnom			
Auxiliary Voltages Consumption (W) <0.2% of PACnom <40W <40W <40W <a0w (*)="" (dedicated="" (dial-up,="" (kg)="" (mm)="" (on="" (optional)="" (wxhxd)="" +="" 15="" 1x="" 2-lines="" 55kw="" <a0w="" <ix="" air="" ambient="" approvals="" aurora="" characteristics="" combiner-box)="" communication="" conduit="" control="" cooling="" dimensions="" display="" dsl,="" each="" easy="" emc="" ethernet,="" fcc="" flow="" gsm)="" included="" interface="" inverter="" isdn,="" mechanical="" module="" module)="" not="" output="" overall="" part="" remote="" required="" rs485="" string="" td="" to="" user="" weight="" yes="" yes<=""><td></td><td>1,00</td><td></td></a0w>		1,00	
Accord Communication Aurora Easy Control (Dial-Up, ISDN, Ethernet, DSL, GSM)		<0.2% of PACnom	<0.2% of PACnom
Local Communication 1x RS485 + 1x RS485 (dedicated to String combiner-Box) 1x RS485 + 1x RS485 (dedicate			
Remote Communication (optional) Aurora Easy Control (Dial-Up, ISDN, Ethernet, DSL, GSM) User Interface 2-lines Display (on each inverter module) 2-lines Display (on each inverter module) Mechanical Characteristics Dimensions (WxHxD) (mm) (*) Dutput Air conduit not included Overall Weight (kg) 1250 x 2100(*) x 810/49.2"x82.6"x31.8" 1250 x 1570(*) x 810/49		1x RS485 + 1x RS485 (dedicated to String combiner-Box)	1x RS485 + 1x RS485 (dedicated to String combiner-Box
User Interface 2-lines Display (on each inverter module) 2-lines Display (on each inverter module)	Remote Communication (optional)		-
Mechanical Characteristics Dimensions (WxHxD) (mm) (*) 1250 x 2100(*) x 810/49.2"x82.6"x31.8" 1250 x 1570(*) x 810/49.2"x82.6"x31.8" Overall Weight (kg) 1200/2640 780/1716 55kW module Weight (kg) 65/143 65/143 Required Ambient Air Cooling Flow 4000m³/h/7200CFM 4000m³/h/7200CFM Approvals FCC part 15 FCC part 15 EMC FCC part 15 FCC part 15 CE Compliance Yes Yes			
Dimensions (WxHxD) (mm) (*) 1250 x 2100(*) x 810/49.2"x82.6"x31.8" 1250 x 1570(*) x 810/49.2"x82.6"x31.8" Overall Weight (kg) 1200/2640 780/1716 55kW module Weight (kg) 65/143 65/143 Required Ambient Air Cooling Flow 4000m³/h/7200CFM 4000m³/h/7200CFM Approvals FCC port 15 FCC port 15 CE Compliance Yes Yes		Z mics display (on outh inverter measury)	2 miles display (on each inverse measily
Output Air conduit not included 1230 x 2100 () x 610/47.2 x 82.0 x 31.0 1230 x 1570 () x 610/47.2 x 82.0 x 31.0 Overall Weight (kg) 1200/2640 780/1716 55kW module Weight (kg) 65/143 65/143 Required Ambient Air Cooling Flow 4000m³/h/7200CFM 4000m³/h/7200CFM Approvals EMC FCC port 15 FCC port 15 CE Compliance Yes Yes		1250 - 2100/*) - 010 /40 2#-02 /#-21 0#	1250 1570/*\ 010 /40 2#02 /#21 0#
55kW module Weight (kg) 65/143 65/143 Required Ambient Air Cooling Flow 4000m³/h/7200CFM 4000m³/h/7200CFM Approvals FCC port 15 FCC port 15 CE Compliance Yes Yes	Output Air conduit not included	'	,
Required Ambient Air Cooling Flow 4000m³/h/7200CFM 4000m³/h/7200CFM Approvals FCC port 15 FCC port 15 EMC FCC port 15 Yes CE Compliance Yes Yes	Overall Weight (kg)	-	1
Approvals FCC part 15 FCC part 15 EMC Yes Yes	55kW module Weight (kg)		
EMC FCC part 15 FCC part 15 CE Compliance Yes Yes	Required Ambient Air Cooling Flow	4000m ³ /h/7200CFM	4000m³/h/7200CFM
CE Compliance Yes Yes	Approvals		
			FCC part 15
Grid connection (pending) DK5940 Ed. 2.2, VDEW, UL1741, RD1663/2000 DK5940 Ed. 2.2, VDEW, UL1741, RD1663/2000	CE Compliance	Yes	Yes
	Grid connection (pending)	DK5940 Ed. 2.2, VDEW, UL1741, RD1663/2000	DK5940 Ed. 2.2, VDEW, UL1741, RD1663/2000