

MPV System BROCHURE

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MPV.SYSTEM75

MODULAR SOLAR INVERTER

Solar Inverters for Grid Connection
Commercial, Industrial, Government
and Utility Applications

15kW, 30kW, 45kW, 60kW, 75kW

- Three-phase, transformer-less, central inverter in a modular design
- Supports from 1 to 5 inverter modules



INDUSTRY-LEADING EFFICIENCY

AEG Power Solutions introduces the new Modular Solar Inverter System with leading-edge power electronics in a transformer-less, modular design. Inverter modules are turned on as needed to match the solar power available and are therefore run at the optimal efficiency. This module optimization, coupled with advanced inverter design and no transformer losses, yields efficiencies of up to 97%.

ADVANCED CONTROL & COMMUNICATIONS

The Maximum Power Point Tracking is designed to meet the latest requirements for fast response to dynamic changes in clear and cloudy conditions, plus provide reliable active/sleep detection for day and night shift.

Monitoring and power plant integration is based on CAN BUS communication. Web server and datalogging are integrated into the inverter. Advanced operator controls are supported.

Please see the data sheet MPV.System150 for Modular Systems supporting from 90kW to 150kW.

** Check system wiring per NEC prior to upgrading number of modules*

SMALL, LIGHTWEIGHT & FLEXIBLE

A fully loaded MPV.System75 takes up half the space and weighs less than half of its competitors. For installation, simply place the cabinet assembly and add the number of inverter modules that you need. If the system capacity changes or the customer wants to expand, just insert additional inverter modules when you need them.*

ROBUST & RELIABLE

The MPV.System75 is designed for a 20-year life indoors or outdoors. If one inverter module should fail, the rest of the modules will continue to operate. The impact is a loss of a portion of the output power typically only at the peak output of the day. Inverter modules, surge protectors, filters and other components are easily replaced in the field.

POWER IS OUR BUSINESS

With more than 60 years of experience in power supply systems and solutions for power plants, AEG Power Solutions offers a comprehensive range of services aimed at securing maximum yields for your PV power installation. These services include contractual solutions with service guarantees and high inverter availability.

MPV.SYSTEM75

TECHNICAL DATA



	MPV.015	MPV.030	MPV.045	MPV.060	MPV.075
DC INPUT					
Recom. PV power	15 - 19 kWp	30 - 38 kWp	45 - 56 kWp	60 - 75 kWp	75 - 94 kWp
DC voltage range (full power)	300 - 600 VDC				
Max. DC voltage	600 VDC				
DC start voltage	300 VDC				
MPPT voltage range	250 - 600 VDC				
Max. DC current	53 A	106 A	159 A	212 A	265 A
AC OUTPUT					
Nom. AC output power	15 kW	30 kW	45 kW	60 kW	75 kW
AC output voltage	480 VAC L-L, +10% / -12%, Wye, no neutral connection required				
AC output current <small>* AC wiring should be based on 91 A max. output current</small>	18 A	36 A	54 A	72 A	91 A
Nominal frequency	60 Hz ± 3 Hz				
Total harmonic distortion	< 3%				
GENERAL DATA					
Peak efficiency	97.0 %	97.0 %	97.0 %	97.0 %	97.0 %
CEC efficiency	96.5 %	96.5 %	96.5 %	96.5 %	96.5 %
Standby losses	< 60 W				
Operating temperature	-20 to 50 degrees C (full power range)				
Relative humidity	0 ...95 % (non condensing)				
Enclosure type	NEMA 3R (indoor/outdoor)				
Altitude above sea level	6,550 feet (output de-rated above 6,550 feet)				
Dimensions (W x H x D)	28 x 51 x 34 inches				
Weight	429 lbs.	479 lbs.	530 lbs.	580 lbs.	631 lbs.
Standards	Agency certified to UL 1741, IEEE 1547, FCC Part 15				
Warranty	5 years, extendable up to 20 years				
SAFETY					
Ground fault protection	Internal GFDI (Ground Fault Detection/Interrupter)				
Surge protection	AC and DC, Type 2				
AC and DC disconnects	Yes (integrated)				
COMMUNICATION & CONTROL					
Display operating unit	Graphical LCD with keypad				
Connections and protocol	Ethernet				
Performance monitoring and datalogging	Standard: Integrated web server, Remote Monitor Application, on-board storage for up to 20 years				

Technical data is preliminary and subject to change without prior notice.

AEG is a registered trademark used under licence from AB Electrolux.

MPV.SYSTEM150

MODULAR SOLAR INVERTER

Solar Inverters for Grid Connection
Commercial, Industrial, Government
and Utility Applications

90kW, 105kW, 120kW, 135kW, 150kW

- Three-phase, transformer-less, central inverter in a modular design
- Supports from 1 to 10 inverter modules



INDUSTRY-LEADING EFFICIENCY

AEG Power Solutions introduces the new Modular Solar Inverter System with leading-edge power electronics in a transformer-less, modular design. Inverter modules are turned on as needed to match the solar power available and therefore run at optimal efficiency. This module optimization, coupled with advanced inverter design and no transformer losses, yields efficiencies of up to 97%.

ADVANCED CONTROL & COMMUNICATIONS

The Maximum Power Point Tracking is designed to meet the latest requirements for fast response to dynamic changes in clear and cloudy conditions, plus provide reliable active/sleep detection for day and night shift.

Monitoring and power plant integration is based on CAN BUS communication. Web server and datalogging are integrated into the inverter. Advanced operator controls are supported.

Please see the data sheet on the MPV.System75 for Modular Systems supporting from 15kW to 75kW.

** Check system wiring per NEC prior to upgrading number of modules*

SMALL, LIGHTWEIGHT & FLEXIBLE

A fully loaded MPV.System150 takes up half the space and weighs less than half of its competitors. For installation, simply place the cabinet assembly and add the number of inverter modules that you need. If the system capacity grows or the customer wants to expand, just insert additional inverter modules when you need them.*

ROBUST & RELIABLE

The MPV.System150 is designed for a 20-year life indoors or outdoors. If one inverter module should fail, the rest of the modules will continue to operate. The impact is a loss of a portion of the output power typically only at the peak output of the day. Inverter modules, surge protectors, filters and other components are easily replaced in the field.

POWER IS OUR BUSINESS

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MPV.SYSTEM150

TECHNICAL DATA



	MPV.090	MPV.105	MPV.120	MPV.135	MPV.150
DC INPUT					
Recom. PV Array STC Rating	90 - 113 kWp	105 - 131 kWp	120 - 150 kWp	135 - 169 kWp	150 - 187 kWp
DC voltage range (full power)	300 - 600 VDC				
Max. DC voltage	600 VDC				
DC start voltage	300 VDC				
MPPT voltage range	250 - 600 VDC				
Max. DC current	318 A	371 A	424 A	477 A	530 A
AC OUTPUT					
Nom. AC output power	90 kW	105 kW	120 kW	135 kW	150 kW
AC output voltage	480 VAC L-L, +10% / -12%, Wye, no neutral connection required				
AC output current <small>* AC wiring should be based on 182 A max. output current</small>	109 A	127 A	145 A	163 A	182 A
Nominal frequency	60 Hz ± 3 Hz				
Total harmonic distortion	< 3%				
GENERAL DATA					
Peak efficiency	97.0 %	97.0 %	97.0 %	97.0 %	97.0 %
CEC efficiency	96.5 %	96.5 %	96.5 %	96.5 %	96.5 %
Standby losses	< 60 W				
Operating temperature	-20 to 50 degrees C (full power range)				
Relative humidity	0 ...95 % (non condensing)				
Enclosure type	NEMA 3R (indoor/outdoor)				
Altitude above sea level	6,550 feet (output de-rated above 6,550 feet)				
Dimensions (W x H x D)	28 x 74 x 34 inches				
Weight	807 lbs.	858 lbs.	908 lbs.	959 lbs.	1009 lbs.
Standards	Agency certified to UL 1741, IEEE 1547, FCC Part 15				
Warranty	5 years, extendable up to 20 years				
SAFETY					
Ground fault protection	Internal GFDI (Ground Fault Detection/Interrupter)				
Surge protection	AC and DC, Type 2				
AC and DC disconnects	Yes (integrated)				
COMMUNICATION & CONTROL					
Display operating unit	Graphical LCD with keypad				
Connections and protocol	Ethernet				
Performance monitoring and datalogging	Standard: Integrated web server, Remote Monitor Application, on-board storage for up to 20 years				

Technical data is preliminary and subject to change without prior notice.

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