



# Your Best Partner for PV Inverters



More energy	Motech PVMate inverters have the highest CEC efficiency in its class, 96.0%. Maximum efficiency is 96.7%
Certified	Certified for the new UL 1741/IEEE 1547
Warranty	10 years, standard warranty
Reliable and dependable	Motech has been in business for over 25 years, and it is the seventh largest solar cell manufacturer in the world
Ease of installation & lower cost	Integrated DC disconnect switch and fused series string combiner
Flexibility	Wide PV input MPPT tracking voltage range enables flexibility in module selection and sizing of PV system
Light weight	Motech PVMate inverters are the lightest grid-connected inverters that have 96% CEC efficiency
Versatility	Suitable for residential or light commercial applications
LCD display	Important system performance parameters are shown on a user-friendly LCD display
Ease of serviceability	In the highly unlikely event that the inverter needs to be serviced, the independent inverter enclosure can easily be detached from the AC/DC wiring box, and the wiring box can remain intact on the wall

Available exclusively from



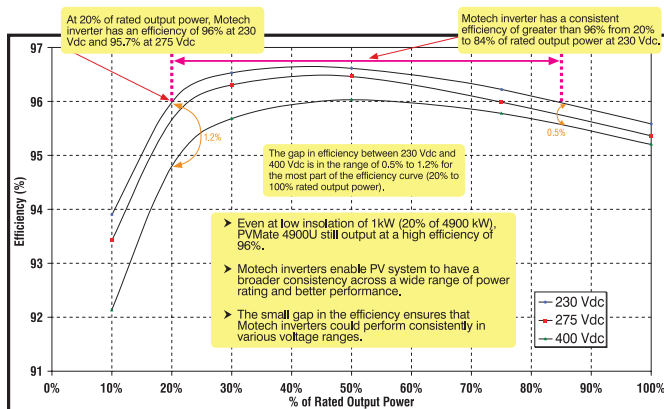
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# PVMate 2900U 3840U 3900U 4900U 5300U

Models	PVMate 2900U		PVMate 3840U		PVMate 3900U		PVMate 4900U		PVMate 5300U	
Negative ground inverters	PVMate 2900U		PVMate 3840U		PVMate 3900U		PVMate 4900U		PVMate 5300U	
Positive ground inverters	PVMate 2900U-PG		PVMate 3840U-PG		PVMate 3900U-PG		PVMate 4900U-PG		PVMate 5300U-PG	
<b>Output Data (AC)</b>										
Output	240 V	208 V	240 V	208 V	240 V	208 V	240 V	208 V	240 V	208 V
Grid voltage, nominal	240/208 V <sub>AC</sub> auto select									
Grid voltage, operating range*	211 ~ 264 V <sub>AC</sub>	183 ~ 228 V <sub>AC</sub>	211 ~ 264 V <sub>AC</sub>	183 ~ 228 V <sub>AC</sub>	211 ~ 264 V <sub>AC</sub>	183 ~ 228 V <sub>AC</sub>	211 ~ 264 V <sub>AC</sub>	183 ~ 228 V <sub>AC</sub>	211 ~ 264 V <sub>AC</sub>	183 ~ 228 V <sub>AC</sub>
Grid frequency, nominal	60 Hz									
Grid frequency, operating range*	59.3 ~ 60.5 Hz									
Maximum output power	2900 W	2700 W	3840 W	3330 W	3900 W	3400 W	4900 W	4300 W	5300 W	4600 W
Maximum output current	13 A		16 A		16.3 A		20.7 A		22.1 A	
Output over current protection	20 A		20 A		25 A		30 A		30 A	
Maximum output fault current	15 A		20 A		20 A		25 A		25 A	
Startup current	< 2 A									
Maximum grid backfeed current	0 A									
Waveform	True sine									
Power factor	> 0.99									
Total harmonic distortion	< 3%									
DC component	< 0.5%									
Phase	Split Phase or Single phase 240									
<b>Input Data (DC)</b>										
MPP voltage range	200 ~ 550 V <sub>DC</sub>									
Maximum input voltage	600 V <sub>DC</sub>									
PV start voltage*	235 V <sub>DC</sub>									
Maximum input current	16 A		20 A		20 A		25 A		25 A	
Maximum input short circuit current	24 A		24 A		24 A		30 A		30 A	
Number of fused string inputs (Optional)	3						4			
<b>Efficiency</b>										
Maximum efficiency	96.7%	96.4%	96.7%	96.5%	96.7%	96.5%	96.6%	96.4%	96.4%	96.2%
CEC efficiency	96.0%	95.5%	96.0%	95.5%	96.0%	95.5%	96.0%	96.0%	96.0%	95.5%
Night-time tare loss	0.5W									
<b>Environment</b>										
Operating temperature range	-25 ~ +55°C (-13°F ~ +131°F)									
Maximum full power operating temperature without derating	55°C (131°F)		55°C (131°F)		55°C (131°F)		55°C (131°F)		53°C (127.4°F)	
Relative humidity	Maximum 95%									
<b>Mechanical</b>										
Outdoor enclosure	NEMA 3R, Rainproof									
Cooling	Convection cooled	Controlled forced ventilation								
Input and output terminals	Accept wire size of 4 to 16 mm <sup>2</sup> (#12 to #6 AWG)									
Inverter weight	23 kg (50.7 lb)					28 kg (61.7 lb)				
Shipping weight	27 kg (59.5 lb)					32 kg (70.5 lb)				
Dimensions(HxWxD)	732 x 454 x 175 mm (28.8 x 17.9 x 6.9 inches)					732 x 454 x 210 mm (28.8 x 17.9 x 8.3 inches)				
Shipping dimensions(HxWxD)	840 x 540 x 275 mm (33.1 x 21.3 x 10.8 inches)					840 x 548 x 305 mm (33.1 x 21.6 x 12 inches)				
<b>Features</b>										
Communications	RS232 and RS485 (wireless communication is optional)									
Display	LED / LCD									
Certifications	UL1741, FCC part 15B, IEEE 1547, IEEE C62.41.2, IEEE C37.90.1									
Warranty	10 years									

\* Factory settings can be adjusted with the approval of the utility. This unit is provided with adjustable trip limits and may be aggregated above 30kW on a single Point of Common Coupling.  
 \* All specifications are subject to change without notice.

## 96% CEC efficiency, the highest on CEC inverter list\*



\* Motech PVMate 2900U ~ 5300U have 96% CEC efficiency, and they ranked Number One as the most efficient PV inverters with transformers according to CEC inverter list, [http://www.consumerenergycenter.org/cgi-bin/ef/ef/ef\\_inverters.cgi](http://www.consumerenergycenter.org/cgi-bin/ef/ef/ef_inverters.cgi)

### Better performance at high temperature

Motech inverters operate at full rated power in hot climates up to 53°C.

### Greater flexibility

The MPPT tracking voltage for Motech inverters is from 200 V to 550 V giving greater flexibility in module selection and sizing of PV systems.



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