



DGM-460

UTILITY GRADE GRID TIE
MICRO-INVERTER

MAXIMUM UPTIME POWER OPTIMIZATION SCALABLE

DGM-460 OEM SERIES:

460 Watt

State-of-the-Art Technology,
Patents Pending

Independent PV Module MPPT

Mates with Dual 60 Cell Mono or Multi-
crystalline PV Modules

Low profile Weather Tight Enclosure

- 40 to 65°C Range

Auto Frequency Detect & Sync (50/60Hz)

208VAC or 230VAC

20 Year Limited Warranty

OVERVIEW

The DGM-460 OEM Series is a 460W standalone state-of-the art photovoltaic (PV) micro-inverter for converting DC to grid-compliant AC power. Designed specifically for grid-tie applications, the unit utilizes Direct Grids' unique closed loop MOSFET planar technology, which significantly increases reliability and efficiency. The DGM-460 mates with two of many popular 60 cell mono or poly-crystalline modules in the market.

FEATURES and BENEFITS

Energy Efficient: minimizing wasted energy in the conversion process equates to more energy that can be placed back on the grid. The DGM-460 offers high efficiency and excellent power factor

High Reliability: backed by state-of-the-art electronics, excellent thermal management and 20 year limited warranty, the DGM-460 enables reduced levelized cost of energy (LCOE) of the total system over the life of ownership

Independent Module MPPT: whether due to soiling, shading or clouds, rest assured, each Direct Grid micro-inverter offers a self tuning power algorithm that maximizes the power output from each PV module

Anti Islanding: the DGM-460 Series micro-inverter continuously monitors the AC utility power, protecting workers and firemen during outages and emergencies. When power is removed, the micro-inverter disconnects from the grid

Scalable Freedom: micro-inverters enable the freedom of using any panel quantity—grow your system size as budget or time permit

Low Profile Weather-Tight Enclosure: The DGM-460 utilizes a low profile weather resistant enclosure permitting mounting of the unit beneath the PV module. There are no fans or mechanical moving parts, which enhance the units' robustness

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DGM SMART SERIES ELECTRICAL SPECIFICATIONS

Part Ordering Code:

Complete ordering code information is available at www.directgrid.com/downloads



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DGM Series Specification	US	EUR
Input Data DC Operating Parameters		
Recommended Input Power	460W	
Peak Power Tracking Voltage	53 - 65V	
Max. DC Input Voltage	75V	
Nom. DC Input Current	8.1A	
Max. DC Input Current	10.0A	
Night Time Power Consumption	10mW	
Output AC Operating Parameters		
Nom. Output Power	430W	430W
Max. Output Power	460W	460W
Max. Output Current (RMS)	2.0A	2.0A
Voltage/Frequency	208 VRMS 50/60Hz	230 VRMS 50/60Hz
Efficiency		
Operating Efficiency Over Temp	93.0%	
CEC Weighted Efficiency	92.0%	
Nom. MPP Tracking	99.0%	
Power Factor	>0.99	
Mechanical Data		
Operating Temperature	-40 to 65°C	
Dimensions (L x W x H)	8.87 x 8.96 x 1.2"	
Enclosure Rating	NEMA-4, IP4X	
Aspiration/Cooling	Natural convection	
Weight	4.8 lbs	
Enclosure Material	Cast aluminum	
Standard Compliance		
EMC	IEEE 1547	CE (EN 61000)
Safety	UL 1741 IEEE 1547	VDE 0126-1-1 EN 50178
Standard Warranty	20 year limited	

* Specifications are subject to change without notice 121210