



Enecsys Micro Inverters

SMI-D480W-60-UL



Maximized Energy Harvest

Improved Safety

Increased Lifetime & Reliability

Enhanced Monitoring Capability

Simplified PV Array Design & Installation

Enecsys develops, manufactures and markets world leading, highly reliable grid-connected solar micro inverters and monitoring systems that offer an outstanding value proposition for solar PV systems.

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Technical Specification

SMI-D480W-60-UL

Input Data (DC)

Nominal PV Power	480W
Recommended Maximum PV Power (STC)	500W
Maximum PV Voltage	44V
Operating PV Voltage Range	20V - 44V
MPPT Voltage Range	23V - 35V
Min/Max Start-up Voltage	22V / 42.5V
Maximum PV Current	24A
Max PV Source Short-circuit Current	32A

Output Data (AC)

Maximum Power	460W
Nominal Voltage/Range	240V / 211V - 264V
Nominal Current	1.92A
Nominal Frequency/Range	60Hz / 59.3Hz - 60.5Hz
Power Factor	> 0.95
Total Harmonic Distortion	< 5%
Maximum Units Per 16A Branch System	6 (single phase)
Maximum Fault Current	10.8A AC 3ms

Efficiency

CEC Efficiency	95.0%*1
Peak Efficiency	96.0%1
Maximum Night Power Consumption	< 30mW

Mechanical Data

Ambient Temperature Range	-40°C to +85°C
Operating Temperature Range	-40°C to +100°C
Enclosure Rating	UL 50 Type 4x
Dimensions (LxHxW)	262mm x 160mm x 40mm*2
Weight	2.1kg
Cooling	Natural Convection

Features & Compliance

Safety Class Compliance	UL1741, CSA-C22.2.1071-01
EMC (Emission & Immunity) Compliance	FCC Part 15 Class B
Grid Connection Compliance	IEEE 1547.1*3
Communication	Zigbee IEEE 802.15.4
Connector	MC4 or MC4 Compatible
PV Compatibility	Compatible with most 60 cell modules
Warranty	20 Years (at full ambient temperature range)
Technology	Thin film capacitors
Isolation	Galvanic
Application	Duo inverter / residential and commercial

*1 - Efficiency maintained over full ambient temperature range from -40°C to +85°C and at nominal output power

*2 - Without the mounting bracket

*3 - In accordance with the Enecsys installation guidelines (please refer to the Enecsys Installation Manual)

All technical specifications contained within this document are subject to change without prior notice

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