EVERGRID

TECHNOLOGY INC

CLEAN ENERGY

A BRIGHTER TOMORROW

MICROINVERTER

EGM-800-277A / 800GR / 800TK

Dual-input microinverter for rooftop solar systems.



KEY FEATURES

High Efficiency
MPPT tracking efficiency up to 99.5%. CEC weighted average efficiency up to 96.5%.

Flexible Application
Supports single or multi-module PV strings, or 90° large-array configurations.

Reliable & Safe
Complies with NEC requirements for RSD and AFCI.

Smart Monitoring
Built-in WiFi / PLC / 4G (optional). Real-time remote monitoring via mobile app or cloud.

Easy Installation
Plug and play - simple and convenient setup.

Durable Design
IP67 / NEMA 6, -40° to +60°C operating range. Natural cooling, no fans, low noise.

Tenk / GlobalRais Compatible
Supports Tenk/GlobalRais solar models.

TYPICAL APPLICATION

Rooftop Solution



CERTIFICATION

UL 1741-SA / UL 1741-SB · CSA C22.2 No. 107.1 · IEC/EN 62109-1/-2

IEEE 1547 · NEC 2023 Sections 690.11, 690.12, 690.33 and 705.12

EGM-800-277A / 800GR / 800TK FULL SPECIFICATIONS

Model	EGM-800-277A / EGM-800GR / EGM-800TK
INPUT | DC	
Recommended Max PV Power	650 W × 2
Max DC Open Circuit Voltage	60 Vdc
Max DC Input Current	20 A × 2
MPPT Tracking Accuracy	>99.5%
MPPT Tracking Range	22 - 55 Vdc / 50 - 60 Vdc (Tenk/GlobalRais)
ISC PV (Absolute Maximum)	25 A × 2
Maximum Backfeed Current to Array	0 A
OUTPUT | AC	
Peak AC Output Power	800 W
Grid Configuration	**277/480 Vac (3φ)**
Max Continuous Output Power	800 W
Allowable Power Grid Voltage	243 - 305 Vac
Rated Output Current	2.89 A
Max Units / Branch, 12 AWG (20 A)	5 units/phase
Max Units / Branch, 10 AWG (30 A)	8 units/phase
Allowable Power Grid Frequency	59.3 - 60.5 Hz
THD	<5% (at rated power)
Power Factor	0.9un - 0.9ov (adjustable)
Current Inrush (Peak / Duration)	9.4 A peak / 15 µs
Nominal Frequency	60 Hz
Max Output Fault Current	9.6 A peak / 10 ms
Max Output Overcurrent Protection	10 A
SYSTEM EFFICIENCY	
Weighted Average Efficiency (CEC)	96.5%
Nighttime Tare Loss	0.11 W
PROTECTION FUNCTION	
Over/Under Voltage Protection	Yes
Over/Under Frequency Protection	Yes
Anti-Islanding Protection	Yes
Over Current Protection	Yes
Reverse DC Polarity Protection	Yes
Overload Protection	Yes
GENERAL	
Protection Degree	NEMA-6 / IP-66 / IP-67
Ambient Temperature	-40°F to +149°F (-40°C to +65°C)
Operating Temperature	-40°F to +185°F (-40°C to +85°C)
Display	LED Light
Communications	Powerline Communications
Environment Category	Indoor and outdoor
Wet Location	Suitable
Pollution Degree	PD 3
Over Voltage Category	II (PV), III (AC MAINS)

All NEC required adjustment factors have been considered for AC outputs.