E-ONYX1020048V

EURONET ONYX SOLAR INVERTER – 10.2kW

Hybrid Solar Inverter | Dual PV Input, MPPT 160A



RATED POWER **10200VA/10200W**	BATTERY VOLTAGE **48V DC**
MPPT VOLTAGE RANGE **90V–450V DC**	MAX PV ARRAY POWER **5400W + 5400W**
MPPT SOLAR CHARGER **160A**	MAX AC CHARGE CURRENT **140A**

OVERVIEW

The EURONET E-ONYX1020048V is the hybrid model of the Onyx Series, a 10.2kW (10200VA / 10200W) single-phase pure sine wave inverter for 48V battery banks. Dual PV inputs accept up to 5400W + 5400W of panels across a 90V–450V DC MPPT range, with a 160A MPPT solar charger and up to 140A of AC charging. It works in grid-tie, off-grid or hybrid mode, feeds the grid at 220/230/240V AC with a power factor above 0.99, and powers two load outputs, including a 3400W second load in battery mode. It supports lithium batteries through BMS communication or lead-acid, with RS232, RS485, Wi-Fi and GPRS.

KEY FEATURES

Dual PV Inputs
Two PV inputs of up to 5400W each, 90V–450V DC MPPT range and a 500V DC maximum open-circuit voltage

160A MPPT Solar Charging
160A max solar charge current plus 140A from the AC charger for fast charging of 48V battery banks

Grid-Tie, Off-Grid & Hybrid
Grid-tie, off-grid and hybrid operation, with programmable PV, battery or grid supply priority

Grid Output
Grid output at 220/230/240V AC, 44.3A nominal, power factor above 0.99 and 98% max efficiency

Two Load Outputs
Main load up to 10200W plus a 3400W second load in battery mode; load cut-off 52V DC, return 54V DC

Full Communication Suite
RS232, RS485, Wi-Fi and GPRS plus lithium BMS communication for monitoring by cloud app or web

TECHNICAL NOTE

E-ONYX1020048V hybrid, 1-phase; 10200VA / 10200W; 48V DC battery. Dual PV 5400W + 5400W, MPPT 90V–450V DC, Voc 500V DC; solar charge 160A, AC charge 140A. Grid output 220/230/240V AC (195V–253V AC), 44.3A, PF >0.99, 98% max efficiency. Second load 3400W (battery mode). AC input 230V AC, 60A max. 530×390×170mm, 16.2 kg net. -10°C to 50°C, 5–95% RH.

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E-ONYX1020048V

PRODUCT TECHNICAL SPECIFICATIONS

PARAMETER	SPECIFICATIONS
GENERAL	
Model	E-ONYX1020048V
Series	Onyx Series
Type	Hybrid solar inverter (on/off-grid)
Phase	1-phase
Rated Power	10200VA / 10200W
Surge Power	Not available
Output Waveform	Pure sine wave
Work Modes	Grid-tie · off-grid · hybrid
Supply Priority	Programmable: PV, battery or grid
Solar Use	Solar energy sent to the load first
BATTERY & CHARGER	
Battery Voltage	48V DC
Battery Type	Lithium (BMS communication) or lead-acid
Float Charge Voltage	Not available
Overcharge Protection	Not available
Max Solar Charge Current	160A
Max AC Charge Current	140A
Max Solar + AC Charge Current	160A
Charging	Smart charge design for longer battery life
PV INPUT / SOLAR CHARGER	
Charger Type	MPPT, built in
PV Inputs	Dual (5400W each)
Max PV Array Power	5400W + 5400W
Nominal PV Voltage	360V DC
Max PV Open-circuit Voltage	500V DC
Start-up / Initial Feeding Voltage	90V / 120V DC
MPPT Voltage Range	90V–450V DC
Max PV Input Current	2/18A
TWO LOAD OUTPUT	
Full Load	10200W
Max Main Load	10200W
Max Second Load (Battery Mode)	3400W
Load Cut-off Voltage	52V DC
Load Return Voltage	54V DC

PARAMETER	SPECIFICATIONS
AC INPUT	
Nominal Input Voltage	230V AC
Input Range (PC Mode)	170V–280V AC
Input Range (Appliance Mode)	90V–280V AC
Frequency	50/60Hz (auto-sensing)
AC Start-up / Auto Restart	120V–140V AC / 180V AC
Max AC Input Current	60A
AC Sources	Grid or generator
GRID OUTPUT (GRID-TIE)	
Nominal Output Voltage	220 / 230 / 240V AC
Output Voltage Range	195V–253V AC
Nominal Output Current	44.3A
Power Factor	>0.99
Max Conversion Efficiency	98% (DC / AC)
AC OUTPUT (BATTERY MODE)	
Output Voltage (Battery)	230V AC ±5%
Waveform	Pure sine wave
Output	Dual output
Transfer Time	10ms (PC) · 20ms (home appliances)
Peak Efficiency, PV to Inverter	98%
Efficiency, Battery to Inverter	94% (DC to AC)
COMMUNICATION	
Interfaces	RS232 / RS485 / Wi-Fi / GPRS
Battery Communication	Lithium BMS
Monitoring	Cloud app / web (via Wi-Fi)
FUNCTIONS	
Run Without Battery	Yes
Lithium Battery Activation	Built-in, automatic
Display & Controls	Removable LCD display and keys touch button
Factory Reset	One-key restoration
Indicator	RGB lights
PHYSICAL & ENVIRONMENTAL	
Dimensions	530 × 390 × 170 mm
Carton Dimensions	618 × 463 × 242 mm
Net Weight	16.2 kg
Gross Weight	16.8 kg
Dust Protection	Built-in anti-dust kit
Operating Temperature	-10°C to 50°C
Humidity	5–95% RH (non-condensing)
IP Rating	Not available
CERTIFICATION	
Compliance	CE

**Specifications are subject to change without prior notice.*

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