



Microinverter Datasheet

ZXIV-M1-300
ZXIV-M1-350
ZXIV-M1-400
ZXIV-M1-450
ZXIV-M1-500

Description

With the output power up to 500 VA, new microinverter ZXIV-M1-500 series rank among the highest for 1-in-1 microinverters.

All of these models listed are equipped with reactive power control and can meet the requirements of EN 50549-1:2019, VDE-AR-N 4105:2018, VFR2019, etc.

The new Sub-1G wireless solution enables more stable communication under various environmental conditions.

Features

01

High-powered microinverter for 1-in-1 with output power up to 500 VA

02

With Reactive Power Control, compliant with EN 50549-1:2019, VDE-AR-N 4105:2018, VFR2019, etc.

03

Safer for rooftop solar stations with rapid shutdown compliance and isolated transformer

04

Connected to one panel, flexible for various applications

05

Sub-1G wireless solution allows stable communication with gateway DTU

Technical Specifications

Model	ZXIV-M1-300	ZXIV-M1-350	ZXIV-M1-400	ZXIV-M1-450	ZXIV-M1-500
Input Data (DC)					
Commonly used module power (W)	240 to 405+	280 to 470+	320 to 540+	360 to 600+	400 to 670+
Maximum input voltage (V)	60	60	65	65	65
MPPT voltage range (V)	16-60				
Start-up voltage (V)	22				
Maximum input current (A)	12	13	14	15	16
Maximum input short circuit current (A)	20	20	25	25	25
Output Data (AC)					
Rated output power (VA)	300	350	400	450	500
Rated output current (A)	1.30	1.52	1.74	1.96	2.17
Nominal output voltage/range (V) ¹	230/180-275				
Nominal frequency/range (Hz) ¹	50/45-55				
Power factor (adjustable)	> 0.99 default 0.8 leading...0.8 lagging				
Total harmonic distortion	< 3%				
Maximum units per 10AWG branch ²	24	21	18	16	14
Maximum units per 12AWG branch ²	15	13	11	10	9
Efficiency					
CEC peak efficiency	96.7%	96.7%	96.7%	96.5%	96.5%
Nominal MPPT efficiency	99.8%				
Night power consumption (mW)	< 50				
Mechanical Data					
Ambient temperature range (°C)	-40 to +65				
Dimensions (W × H × D mm)	182 × 164 × 30				
Weight (kg)	1.75				
Enclosure rating	Outdoor-IP67 (NEMA 6)				
Cooling	Natural convection-No fans				
Features					
Communication	Sub-1G				
Type of isolation	Galvanically Isolated HF Transformer				
Monitoring	Cloud Monitoring System				
Compliance	EN 50549-1: 2019, VDE-AR-N 4105: 2018, VFR2019, IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4, IEC/EN 61000-3-2/-3				

*1 Nominal voltage/frequency range can vary depending on local requirements.

*2 Refer to local requirements for exact number of microinverters per branch.