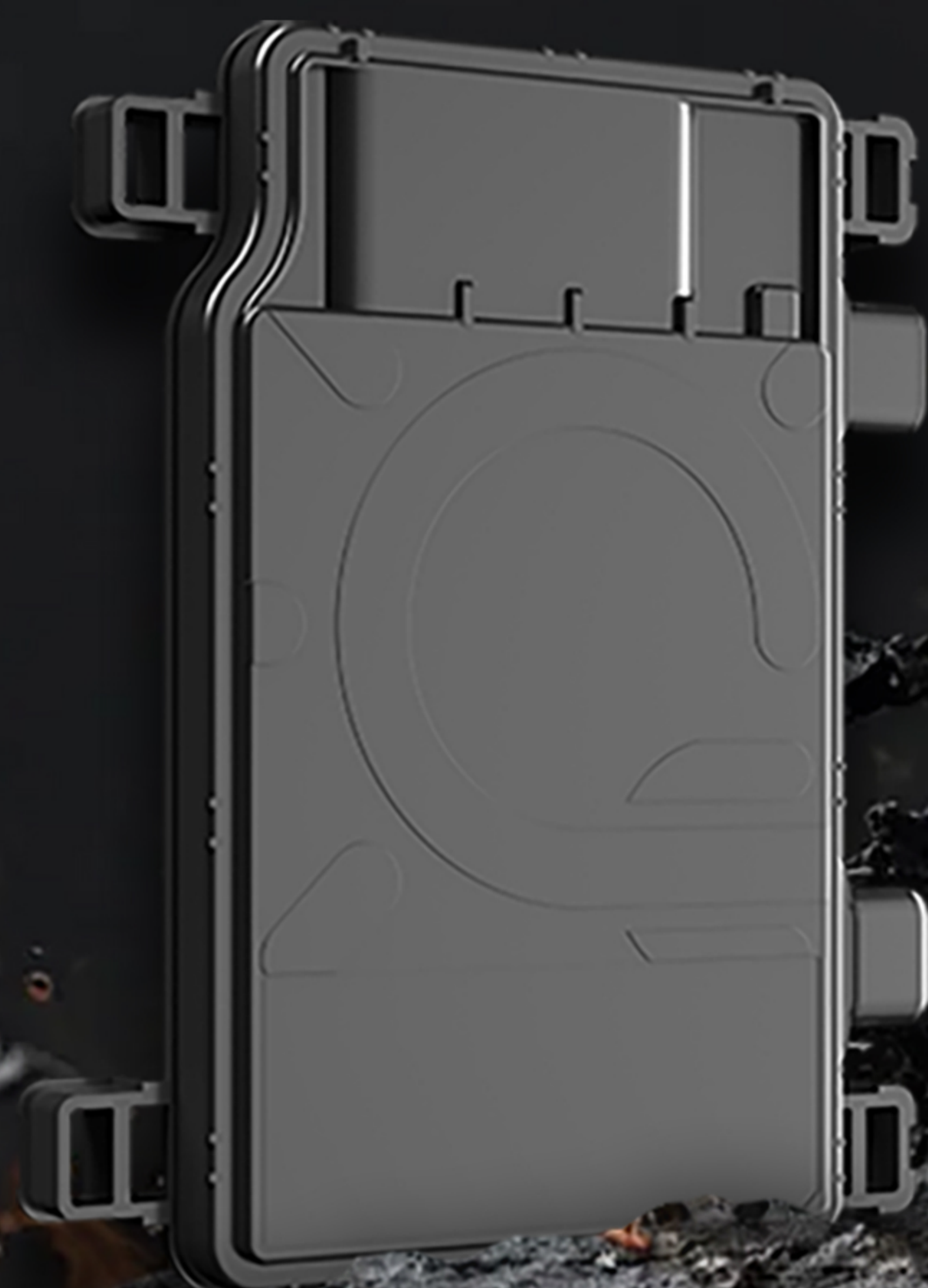


EQ Microinverter 1T1



INTRODUCTION

EQ series microinverters are focused on delivering the ultimate safe and reliable green energy solutions. Through innovative structural design and intelligent control, they maximize solar energy conversion, providing users with greater energy returns.

• Safe and reliable

DC low voltage $\leq 60V$
No risk of high-voltage arc flash
Meet requirements of rapid shutdown
IP rating: IP67
Term of warranty: 25 years

• Intelligent, simple and flexible

Start in 15 min
Monitor the power generation status of each individual component in real time
Easy installation, operation and maintenance, expansion

• Efficient power generation

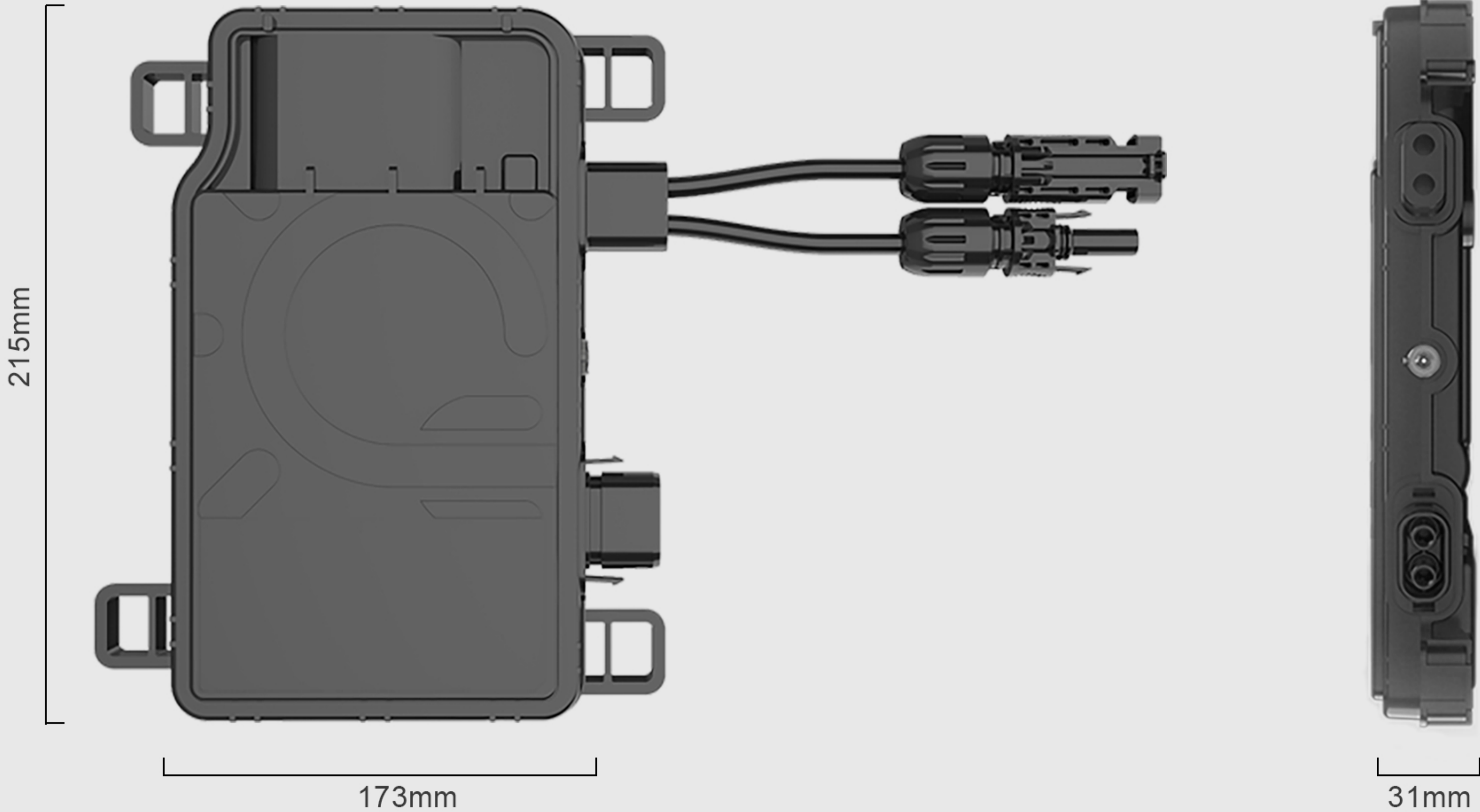
Peak Efficiency: 98.00%
Low-Light Generation: Extends daily power generation by 3 hours.
MPPT Efficiency: 99.90%
High-Temperature Performance: No power output reduction at 65°C.

• High density and light weight

Size: 30% smaller than the industry average.
Weight: Weighs just 1.48kg, 30% lighter than the industry average.
Power Density: 50% increase in power density.

Parameter	Unit	EQ-500-P	EQ-450-P	EQ-400-P
Input (DC)				
PV module compatibility	W	320~700		
Maximum input voltage	V	60		
Minimum starting voltage	V	22		
Operating voltage range	V	12~60		
MPPT voltage range	V	16~55		
Maximum continuous input DC current	A	16		
Maximum input DC short circuit current	A	25		
MPPT quantity	/	1		
Overvoltage class of DC port	/	II		
Output (AC)				
Peak output power	VA	550	495	440
Rated output apparent power	VA	500	450	400
Rated output voltage/range	V	230/184~276		
Rated output current	A	2.17	1.95	1.74
Rated frequency	Hz	50		
Default power factor	/	> 0.99		
Power factor (adjustable)	/	0.8 leading~0.8 lagging		
Total harmonic distortion	/	< 3%		
Power consumption at night	mW	≤20		
Maximum quantity of accessible microin-verters per branch (20A branch current)	/	7	8	9
Overvoltage class of AC port	/	III		
Efficiency parameter				
Peak efficiency	/	98%		
European efficiency	/	97.3%	97.4%	97.2%
MPPT efficiency	/	99.9%		
General parameters				
Ambient temperature	°C	-40~+65		
Storage temperature	°C	-40~+85		
Relative humidity range	RH	0%~100%		
DC interface type	/	MC4		
Dimensions (width × height × depth) (excluding Mounting plate)	mm	215×173×31		
Net weight (excluding Mounting plate)	Kg	1.48		
Enclosure protection class	/	IP67		
Protective Class	/	II		
Cooling method	/	Natural heat dissipation		
Pollution class	/	Class 3		
Altitude	m	4000		
Operational noise	dB	<50		
Others				
Communication mode	PLC			
Isolation mode	Transformer isolation			
Compliance				
Security	IEC/EN 62109-1, IEC/EN 62109-2			
EMC	IEC/EN 61000-6-1, IEC/EN 61000-6-3			
Certification (power grid compliance)	EN 50549-1, VDE-AR-N 4105, DIN VDE V 0124-100, TOR type A+R25, CEI 0-21			
Warranty				
Limited warranty	25 years			

Dimensions of EQ Microinverter 1T1



Rooftop PV Application Scenario Diagram

