



# QUAD Q1200

## Smartest | Most Reliable | Lowest Cost

The **Quad Q1200** is changing the industry standards for today's solar energy solutions, with 4 individual DC input channels for a maximum energy harvest and independent peak power tracking for up to four PV modules.

## Four Panels, One Inverter

The **Quad Q1200** microinverter uses patented technologies that eliminate the use of short-life electrolytic capacitors, providing high reliability, and a 25-year design life.

Based on a Per-Watt rating, the Quad has the lowest microinverter cost, the highest power output, the highest power density, and the lowest weight in the industry.



- **Maximum energy harvest**
- **Quick installation**
- **Safe operation – all AC , with no high-voltage DC**
- **75% reduction in cable costs**
- **Best in class reliability**
- **No single-point of failure**
- **Cloud-based performance monitoring for each panel**
- **Remote updates and programming**

Model:

**Q1200-410 2**

Configuration: 3C

Key Specifications		Unit	Q1200-4102		
Maximum Continuous AC Output Power		W	1350		
Number of Input Channels			4		
Rated Grid AC Voltage		V	208/230/240 autoconfigurable		
Input (DC) Specifications					
PV Panel Rating		W	Up to 400 Wp DC per channel		
Absolute Maximum Input DC Voltage		V	60 per channel		
Maximum Input DC Current		A	16 per channel		
Full Power MPPT Voltage Range		V	23-47 per channel		
Extended MPPT Voltage Range		V	20-50 per channel		
Start-up Voltage		V	19 per channel		
DC Connection Type			MC4 compatible panel receptacles		
Output (AC) Specifications					
Grid Connection Type			208V-L from 3- $\phi$	240V-L from Split- $\phi$	230V-L from 1- $\phi$
Operational Voltage Range		V	183-229	211-264	184-276
Nominal Output Frequency		Hz	60		50
Operational Frequency Range		Hz	59.3-60.5 default		47.5-50.5
			Extendable according to various standards		
Output Current		A	5 (nominal)		
Power Factor			> 0.99 default, programmable from 0-0.99 leading/lagging		
Output THD		%	<2, default		
Inrush Current		A	< 8		
Output Wiring Type			18 AWG		
Output Connection Type			T5 AC micro male connector 98053		
Safety and Protection					
Input Reverse Voltage Polarity Protection			Yes, Polarized PV Connectors		
Anti-Islanding Protection			Yes, programmable to meet various standards UL1741, UL1741 SA, Rule 21, IEC		
Integrated GFDI			Yes		
Isolation			Galvanic isolation		
Abnormal Voltage/Frequency Trip Time			Less than 200ms		
Regulatory					
Regulatory Certifications			UL1741, UL1741 SA/Rule 21/ HECO/Rule 14H, IEEE1547, IEEE1547.1, CSA22.2 No. 107.1, FCC Part 15-Class B, IEC 60068-2(1,2,14,30), IEC62109-1:2010, IEC 62109-2:2011, IEC 61727:2004, IEC 61000-6-3:2007, IEC 61000-6-1:2007, IEC 61000-3-2:2007, IEC 61000-3-3:2007, IEC61683:1999		

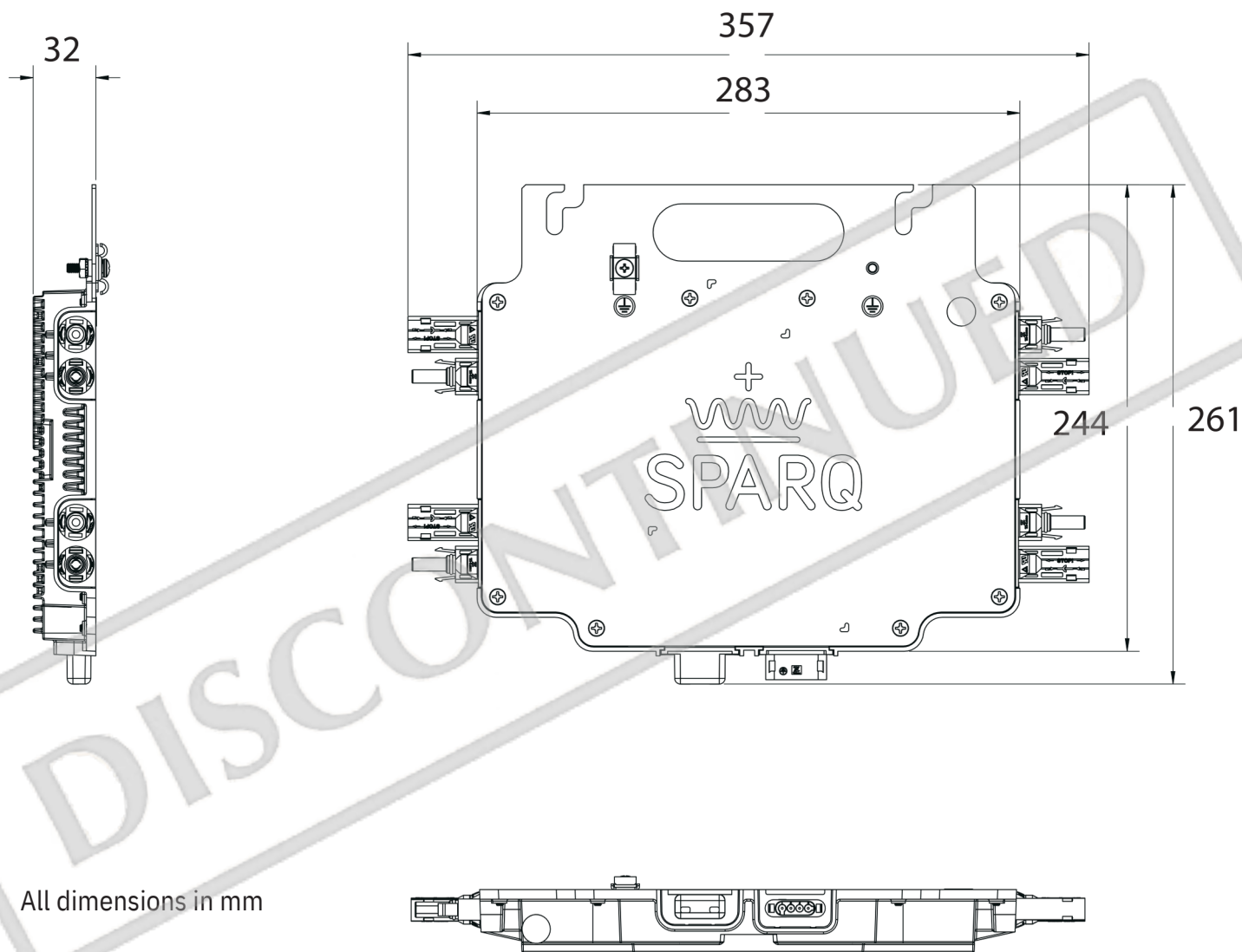
Efficiency and Operating Performance		Unit	Q1200-4102
Maximum Efficiency		%	97.0
CEC Efficiency		%	96.5
MPPT Efficiency		%	Static: 99.85–Dynamic: 99.8
Stand-by Consumption		mW	<30
Communication			
Monitoring System			Wireless, Web-based monitoring through SparqLinq and SparqVu
Environmental			
Ambient Operating Temperature Range	°C (°F)		-40 to +65 (-40 to +149)
Relative Humidity	%RH		0–100 condensing
Mechanical			
Enclosure Rating			NEMA 6, IP-67
Cooling			Natural Convection
Dimensions (HxWxD)	mm (in)	32x186x285 (1.25x7.3x11.2)	
Weight	kg (lb)		3.3 (7.3)
Recommended Mounting			Rack mount with two M8, 1/4", or 5/16" bolts
Warranty			
Standard Limited Warranty			12 Years
Programmable Parameters for Smart Grid			
Voltage Ride-through	Under Voltage	Maximum 4 levels with programmable ride-through time	
	Over Voltage	Maximum 3 levels with programmable ride-through time	
Frequency Ride-through	Under Frequency	Maximum 6 levels with programmable ride-through time	
	Over Frequency	Maximum 4 levels with programmable ride-through time	
Reconnect Time		Programmable wait time of 0-5 minutes	
Power Ramp Rate		Programmable on both active and reactive power	
Volt-VAR		Programmable VAR injection and power factor limit	
Frequency-Watt		Programmable active power curtailment with an adjustable rate of Watt per Hz	

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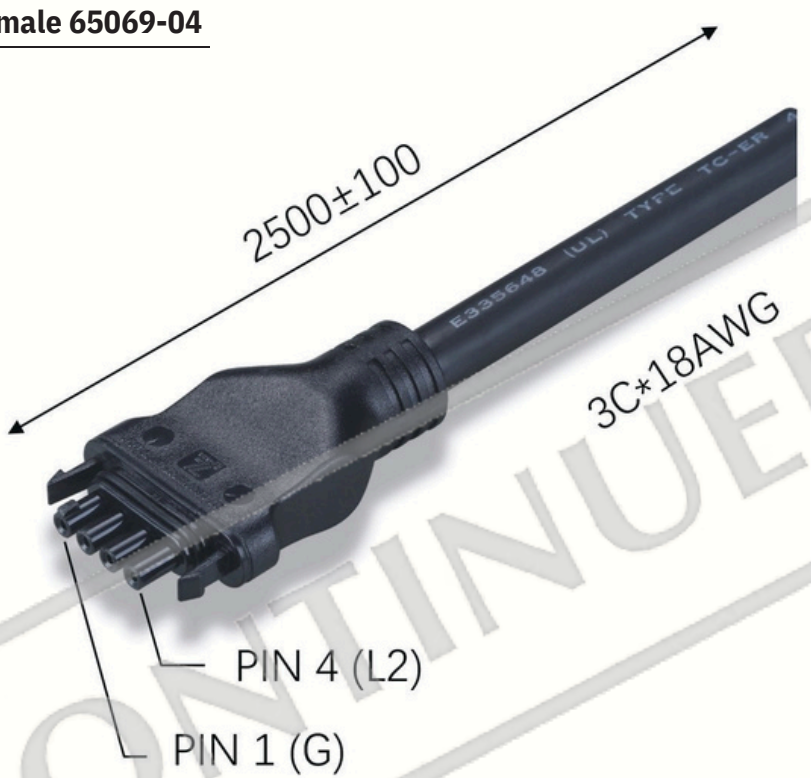
# Mechanical Specifications (inverter)



Mo del:  
**Q1200-410 2**  
Con figuration: 3C

# Mechanical Specifications (cables)

**Ti-Lane T5 free connector female 65069-04**



All dimensions in mm

PIN1	G: Empty
PIN2	L1: Wire Color Black
PIN3	N: Wire Color White
PIN4	L2: Wire Color Red

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Con guration: 3C