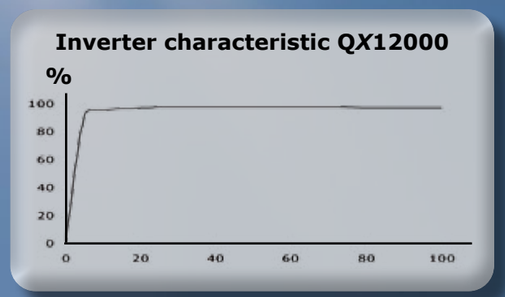
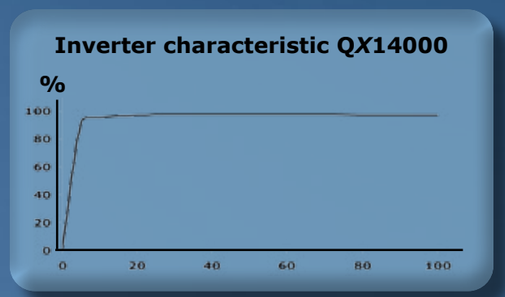
Q*X* Efficiency

Characteristics Q*X*12000 · Q*X*14000





High efficiency also promises high PV yields. But the maximum efficiency alone is here not sufficient. Just because the inverter mostly operates in the partial load range, the efficiency characteristic is crucial to the total yield during the year.

Our inverters are characterized by this excellent partial load behavior. Even at low power they feed in with high efficiency. This not only provides a higher yield, but also less thermal losses, making the electronic components hardly age. The good heat dissipation through the heatsink and the stylish case secure best yields even after many years.

Q3 Energieelektronik GmbH & Co. KG

POWER FOR NEW ENERGIES – We develop and produce innovative and customized electronic devices for the field of renewable energies. Our portfolio includes wind and solar inverters, high performance lithium-ion storage systems, customized string boxes and safety switches. Our maxim is thereby to guarantee our customers a high level of quality, efficiency and safety. Our products are characterized by simple and fast installation. As a result, they save time and achieve high yield stability through a coherent networking concept.

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Your Q3 system partner

Q3130527

Q*X* Inverter Series

Q*X*12000 · Q*X*14000

High efficiency > 98%

Homogenious yields

Integrated web server

6 years warranty

Made in Germany

POWER FOR NEW ENERGIES

Beneficial in every aspect

Highest efficiency
Optimal yields throughout continuous and accurate MPP tracking and a maximum efficiency of over 98%.

Fast and precise MPP tracking
The continuous and exact calculation of the max. power point guarantees each time the optimal yield.

Modern communication
All *QX* inverters have an integrated web server which can be read via Ethernet.

Longevity
The high-quality components from Q3 guarantee a long and powerful functionality of the inverters.

All in One
All necessary features for a modern operation are integrated within the device.

Temperature management
Low heat development and rapid removal spare the electronic components. This ensures high performance over many years.

Operational safety
The intelligent internal management guarantees high system stability and ensures a stable infeed.

Plug & Play
The device does not have to be opened during installation. All connections are made from the outside.

Homogeneous yields
Even at lowest PV performances, the *QX* inverters are characterized by a high inverter efficiency. This secures yields especially in the partial load range.

The inverter is the heart of any photvoltaic power plant. Efficiency, fast and precise MPP tracking and operational safety decide significantly about the yield of each plant. Q3 Energieelektronik GmbH & Co. KG provides with the *QX* inverter an exceptionally powerful product, which combines most advanced software and high efficient power electronics in one device.

Technical Data

*QX*12000 · *QX*14000

	QX12000	**QX14000**
Recomended DC power range	9000 – 12000 W	11000 – 14000 W
Nominal power AC	10000 W	12000 W
Max. apparent AC power (VDE-AR-N 4105)	10000 VA	12000 VA
Max. power AC	11000 W	13000 W
Max. current AC	3 x 16 A	3 x 17.4 A
AC Voltage	3x 230 / 400 V	
MPP voltage range	350 – 720 VDC	
MPP Trackers	3	
Open circuit voltage DC	850 VDC	
Max. current DC	11.0 A	13.2 A
Max. efficiency	98%	98%
European efficiency	97.2%	97.3%
Certificates	CE, DIN VDE-AR-N-4105, VDE 0126	
DC switch	integrated	
Phase control	3 phases	
Isolation control	integrated	
All-pole sensitive residual current monitoring	integrated	
Display	4-line	
Status LED	duo LED	
Error warning	buzzer	
Data logging	integrated	
Interfaces	RS232 / RS485 / Ethernet	
DC connections	2x H4 per MPP tracker	
Protection rating (according to IEC 60529)	IP 31	
Topology	transformerless, 3 phases	
Operating temperature range	-20°C - +40°C	
Storage temperature range	-20°C - +70°C	
Humidity (non condensing)	max. 90%	
Dimensions (WxHxD)	620 x 400 x 230 mm	
Weight	ca. 40 kg	
Cooling concept	convection	
Self-consumption (operating)	ca. 7 W	ca. 9 W
Self-consumption (night)	30 mW	10 mW
Min. infeed power	ca. 10 W	
Harmonic factor	< 4%	
Power factor (cos phi) adjustable	0.9 overexited - 0.9 underexited	
Frequency AC nom./min./max.	50 / 47.5 / 51.5 Hz	
Warranty	6 years	

Rated voltage: U_{mpp} 350 VDC; UAC 230 V

Technical subject to alterations.