



QY Inverter Series

QY3000 • QY4000 • QY5000

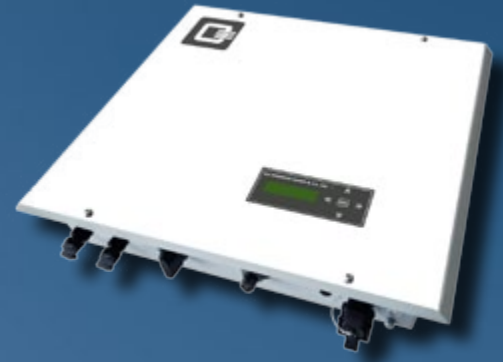
Low input voltage range from 80 VDC

Wide MPP range provides high design flexibility

Yield control by integrated energy data logger

High Efficiency: > 97 %

IP 65-Housing for indoor and outdoor use



These new transformerless inverters QY3000, QY4000 and QY5000 from Q3 *ENERGIE* GmbH & Co. KG can be characterized by its small and compact design, wide range of PV-input voltage and main communication interfaces necessary for future grid control and monitoring. Through a combination of several inverters in an installation, even small roofs with different alignments and shading situations can be optimized for maximum yields. Free webserver included!

Housing

The inverter housing (IP65) features a compact design. Because of the high efficiency, the inverter only needs a convection cooling with the installed heat sink.

Yield control

An integrated annual energy data logger reliably logs the energy which is fed-in into the grid. Besides that, this data logger can be programmed freely for plant monitoring.

Homogeneous yields

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

Wide input voltage range

Due to the wide input voltage range from 80 to 500 V a wide PV-module range can be used. The inverters run with even low levels of solar ration, exploiting the daily sunshine to its optimum.

Connection

All devices of one installation can be connected through the integrated RS485-Bus. This will allow simple and easy communication with other inverters, e.g. for power reductions required.

Grid monitoring

Grid frequency and voltage will continuously be monitored by the inverter. These requirements vary from country to country and can be adapted by changing parameters



Technical Data

QY3000 · QY4000 · QY5000

DC Input	QY3000	QY4000	QY5000
Max. recommended DC power	4.400 W	4.800 W	6.000 W
UDCmax	500 V		
UDCmin	80 V		
UDC nom	250 V		
MPP range	80 - 400 V		
I DCmax	10,5 A/MPPT		
MPP trackers	2		
Inputs	2		
Connection	LC4 (MC4-compatible)		
AC Output	QY3000	QY4000	QY5000
Nominal AC output	3.680 W	4.000 W	5.000 W
P AC max	4.000 W	4.400 W	5.400 W
U AC nom	230 V		
I AC max	16,5 A	18 A	22 A
S ACmax	4.000 VA	4.400 VA	5.400 VA
Cos phi	0,8c - 1,00 - 0,8i		
Frequenz nom	50 Hz		
Frequenzbereich	45 - 65 Hz		
Rated power factor	ca. 1		
Connection	Wieland RST		
Mechanic			
Dimensions (H x W x D)	443 x 495 x 185 mm		
Weight	25 kg		
Ambient temperature	- 20 to +60°C		
Cooling concept	Free convection		
Max. humidity	90% (NC)		
Protection class	IP 65		

Efficiency

Max. efficiency	97,20%
Euro ETA	97%

Security

Conformity	CE, VDE-AR-N 4105, VDE 0126-1-1
DC circuit breaker	integrated
All-pole AC/DC sensitive residual current device	integrated
Earth fault monitoring	integrated
Kind of grid monitoring	Single-phase
Protection class II	IEC 62103

Communication

Interface	RS485, Ethernet
Data logger	integrated
Memory size	32 kB
Display	16 signs, 2-line
Warranty	5 years



Q30811218 Subject to technical alterations, errors and misprints excepted.



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We develop and produce innovative and customized electronic devices for the field of renewable energies. 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.