



Features:

- EtherCAT Conformance test tool verified
- Isolated 16-channel Digital Input and 16-channel Digital Output
- Digital Output Load Voltage Rating Up to 60VDC
- Support 1-channel of 16-bit DAC and 1-channel of 16-bit ADC Interface
- Support one standard RS232/485 Serial port
- Support EtherCAT Distributed Clock (DC) Mode and SM Mode
- Internal Monitoring Hardware Information

Specifications

Digital I/O	Digital Input	Digital Output
Channels	16 (Isolated)	16 (Isolated)
Input Type	Sink (Supports both NPN and PNP configurations)	
Frequency	Safe Operating Frequency: ≤3000 Hz Rise Time (tr): 6 μs, Fall Time (tf): 6 μs	Operating Frequency: 1000Hz Turn-On Time: 0.25 ms, Turn-Off Time: 20 μs
Load Voltage	+24V (Options: 24V or 48V)	+60Vdc
Load Current	-	Typ. 500mA (peak 1000mA)
Isolation Protection	2500 Vrms	1500 Vrms
Analog I/O	Analog Input	Analog Output
Channels	1 (Differential)	1
Input/Output Type	Voltage (V)	Voltage (V, mV), Current (mA)
Current Range	-	0~24mA, 3.5~23.5mA, 0~20mA, 4~20mA, ±24mA
Voltage Range	±22V, ±20V, ±11V, ±10V, 5V, 0~22V, 0~20V, 0~11V, 0~10V	0~5V, 0~10V, ±5V, ±10V, 0~6V, 0~12V, ±6V, ±12V
Overvoltage Protection	Up to ±24 V	-
Resolution	16-bit with accuracy ±0.2% FSR @25°C	16-bit with accuracy ±0.2% FSR@25°C
Serial Port		
Interface Mode	RS232/RS485 (D-Sub 9-pin)	
Data transfer rate (bps)	2400,4800,9600,14400,19200,38400,57600,115200	
Data width (bit)	5/6/7/8	
Hardware Flow Control	CTS/RTS	
EtherCAT		
Cable Type	Ethernet/EtherCAT Cable (Min. CAT 5), Shielded	
Cycle Time	1 ms	
Distributed Clock (DC)	Yes	
General		
Connector	Euroblock (Digital Input: Red, Digital Output: Orange, Analog Input: Green, Analog Output: Orange)	
Power Connector	4-pin Power Input/Output & 2-pin FGND	
Power Requirement	+19 to +50VDC Power Input (Typ. +24VDC)	
Power Consumption	3W	
Operating Temperature	-20 to +70°C	
Dimension	107.45 x 49 x 77.31 mm	
Weight	370 g	
Mounting	DIN-Rail	
Internal Monitoring	Temperature, Voltage, Current, Start-up time	

Ordering Information

QEC-R00DFFG-N	EtherCAT SubDevice/16 DI/16 DO/AI/AO/COM
QEC-R11DFFG-N	EtherCAT SubDevice/PoE/16 DI/16 DO/AI/AO/COM

* For detailed ordering information, please contact our sales staff or view the user manual.

Dimension

