

# Technical specifications QuinteQ Flywheel Technology

INTRODUCING THE WORLD'S MOST ADVANCED FLYWHEEL ENERGY STORAGE TECHNOLOGY DEVELOPED BY THE BOEING COMPANY, BROUGHT TO MARKET BY QUINTEQ, MADE IN THE NETHERLANDS. THE QUINTEQ FLYWHEEL HAS NEAR UNLIMITED CYCLING CAPACITY AND CAN FUNCTION AS THE SHOCK-ABSORBER AND PEAK-SHAVER FOR YOUR OPERATION.

## QUINTEQ FLYWHEEL

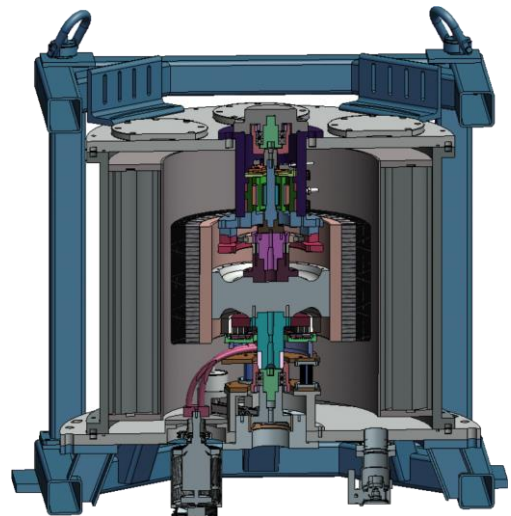
The QuinteQ flywheel can store energy from solar, wind, grid and gensets. The container, filled with flywheels, power electronics, software, monitoring and safety systems, can be used in various configurations due to its modular design.

The QuinteQ flywheel is unique due to a combination of two important factors: A light, carbon rotor is making it smaller, lighter and more compact than other flywheels. Secondly, our superconductive crystal bearings achieve 100% magnetic levitation, provides us with bare minimal stand-by losses. The flywheel can last at least 350.000 cycles and has a very low levelized cost of storage of 0.03 EUR/kWh.

This unique technology makes it very well suited for providing and capturing high power peaks, making it an excellent shock breaker for any microgrid, off-grid or on-grid situation. It can function as peak-shaver, frequency regulator, energy trading asset and can protect your electrical equipment.

### QUINTEQ FLYWHEEL PROTO SPECS *Single 100kW flywheel module*

Power	100 kW
Capacity	5 kWh
Cycle life	> 350.000
C-rating	C20
Standby losses	<0.1%/hr
Response time	<3 ms
Flywheel dimensions	1.5m x 1m x 1m
Single flywheel weight	2.500 kg
System size	20ft container
Operating conditions	-60°C to +60°C



#### QUINTEQ FLYWHEEL COMMERCIAL SPECS *Single 167kW flywheel module*

Power	167 kW
Capacity	5 kWh
Cycle life	> 350.000
C-rating	C33
Standby losses	<0.1%/hr
Response time	<3 ms
Flywheel dimensions	1.5m x 1m x 1m
Single flywheel weight	2.500 kg
System size	20ft container
Operating conditions	-60°C to +60°C

#### QUINTEQ FLYWHEEL COMMERCIAL SPECS *334kW flywheel system (2 flywheels)*

Power	334 kW
Capacity	10 kWh
Cycle life	> 350.000
C-rating	C33
Standby losses	<0.1%/hr
Response time	<3 ms
Flywheel dimensions	1.5m x 1m x 1m
Single flywheel weight	2.500 kg
System size	20ft container
Operating conditions	-60°C to +60°C

#### QUINTEQ FLYWHEEL COMMERCIAL SPECS *500kW flywheel system (3 flywheels)*

Power	500 kW
Capacity	15 kWh
Cycle life	> 350.000
C-rating	C33
Standby losses	<0.1%/hr
Response time	<3 ms
Flywheel dimensions	1.5m x 1m x 1m
Single flywheel weight	2.500 kg
System size	20ft container
Operating conditions	-60°C to +60°C

