

August 2014

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## Oh Snap!

### Nichicon's High Performance Snap-In Capacitors



Due to advances in industrial machinery efficiency, systems continue to require more compact, longer lasting, and more powerful components for inverter control circuits. Nichicon has snap-in type capacitors with rated voltages up to 500V and with 10,000 hours life at 105°C.

By making these upgrades, we have a selection of capacitors with optimal specifications ideal for control circuits, inverters, power supplies, solar and wind power, and other renewable energy equipment.

There are many key advantages to our high performance electrolytic capacitors. Here are five benefits to using them in your designs:

#### **Advantage #1: Rapid Charging and Discharging**

Our QS series is suited for high frequency regenerative voltage for AC servomotors and switching power supplies. This series has special design features proprietary to Nichicon that allow for rapid charging and discharging.

#### **Advantage #2: High Voltage/High Reliability**

Our GX series is made with high reliability foil and a high voltage electrolyte for general inverters and power supplies withstanding up to 5,000 hours at 500V.

#### **Advantage #3: Small Case Sizes**

Our GL series is made for tight spaces including equipment downsizing. Our capacitors are designed to accommodate the miniaturization trend in the industry.

#### **Advantage #4: High Rated Ripple Current**

Our GW series is designed for applications which require high ripple currents. Our rated voltage goes up to 450V and the rated ripple goes up to 5220 mA.

#### **Advantage #5: Long Life Assurance**

Our GR series is designed for long life assurance withstanding 10,000 hours.

## Contact us:

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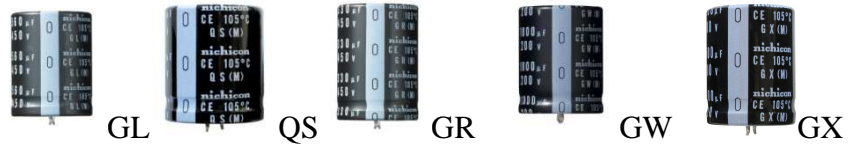
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## Quick Facts

- Long Life Assurance
- High Ripple Current
- High Reliability
- Suited for high frequency regenerative voltage for AC servomotors
- Suited for equipment down-sizing.



## High Performance Product Offerings



Nichicon's High Performance family of capacitors offers:

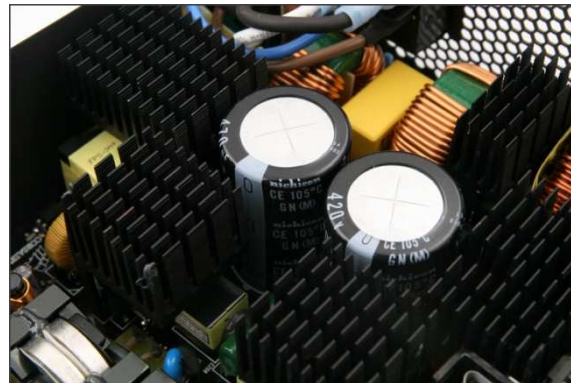
| Series | Life (hours) | Max Voltage |
|--------|--------------|-------------|
| GL     | 2,000        | 450 volts   |
| QS     | 3,000        | 450 volts   |
| GR     | 10,000       | 450 volts   |
| GW     | 3,000        | 450 volts   |
| GX     | 5,000        | 500 volts   |

## Focus Markets

- **Power Electronics**
  - Inverters in power supplies and industrial apparatuses
- **Consumer Electronics**
  - Large audio equipment such as Servo-amps and speakers
- **Transportation**
  - Internal electronics systems in cars and busses.

## Applications

- **Filtering**
  - Snap-in caps are perfectly suited for filtering and storing input current, as well as the smoothing of the output current.
- **Rapid Charge & Discharge**
  - Perfect for switching power supply designs that require rapid regenerative power
- **Safety**
  - Often used in board designs for protection applications that guard against over voltage



There are a wide variety of applications for electrolytic capacitors and in this Tech Topic we have merely scratched the surface. We encourage you to contact your Nichicon Account Representative to assist you if you have any additional questions.

\*Data sheets for the high performance snap-in can be found on Nichicon's web site at [www.nichicon.com](http://www.nichicon.com):