

Replacing your capacitors



Why it's important to replace your capacitors

A typical UPS contains more than a dozen different types and sizes of capacitors. Each capacitor has its own purpose and supports different parts of the UPS. Just like batteries, capacitors degrade over time and it is crucial to keep them updated and functioning.

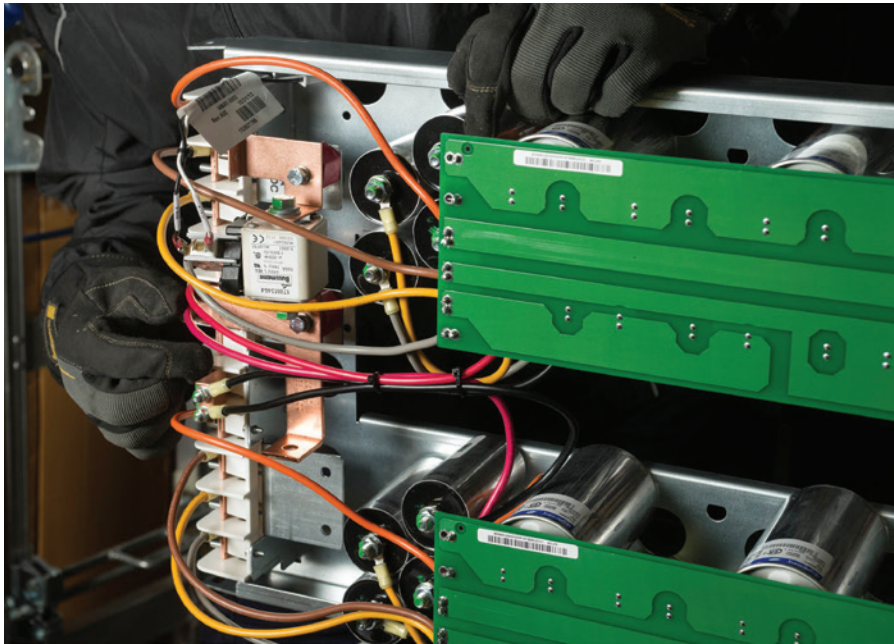
Expected useful life for UPS capacitors

Capacitor type	Eaton UPS model					
	93PM 208V	93PM 480V	9330	9390	9315	9395
DC (electrolytic)	Life of UPS	10 years	Life of UPS	Life of UPS	6 years	Life of UPS
DC (oil filled)	N/A	N/A	N/A	7 years	N/A	7 years
AC (oil filled)	N/A	N/A	7 years	7 years	7 years	7 years

To maximize the performance and reliability of your UPS, treat capacitors like the perishable commodity they are, and plan on replacing them at or near the end of their rated service life. Eaton® customer service engineers can diagnose the condition of the capacitors in your UPSs and perform a replacement of capacitor banks, if necessary, to maintain UPS performance up to factory specifications.

Proactive attention to this often-overlooked element of UPS architecture—the humble capacitor—can extend the value of the UPS that protects your critical electronic systems.





Understanding UPS capacitors

What does a capacitor do?

The primary use for capacitors is to smooth out fluctuations in voltage—a process also known as “supply voltage filtering.” If there’s a change in voltage input, the capacitor dampens or eliminates the voltage change to the output, eliminating the peaks and filling in the valleys to maintain a constant voltage level.

How many capacitors are in a typical UPS?

The inventory of capacitors inside a UPS varies depending on the kVA rating of the unit. To put this in perspective, a typical personal computer contains about 50 capacitors; a 750 kVA UPS may have hundreds of them. Even the smallest UPSs use dozens of capacitors.

What can happen if you don’t replace your capacitors?

- Loss of power to critical loads and processes
- Distorted output voltage
- High input current distortion (THD)
- Problems transferring to or from the bypass source
- Downstream equipment not supported

Ready to replace your capacitors?

In North America, 240 factory-trained Eaton service technicians stand ready to provide premium service for your UPS. Capacitor replacement is covered under our manufacturer’s warranty (but not included in annual service contracts).

If you’re ready to replace your capacitors or need more information before making a decision, let us know. You may even be able to save up to 30 percent!

Email us:
ServiceSalesPricing@Eaton.com

Call us:
800.843.9433, option 4

For more information on services from Eaton, please visit:
[Eaton.com/UPSservices](https://www.eaton.com/UPSservices)