



# 3 WAYS TO ACHIEVE CF LEAKAGE IN THE MEDICAL DEVICE

## WHY DO MEDICAL DEVICES REQUIRE CF LEAKAGE?

Medical devices that contact the heart or bloodstream require a maximum input to patient leakage of 10uA and must have CF technology for safe use. CF is used in various medical applications, including dialysis, infusion pumps, and circulatory support devices.

*So, how can medical devices achieve CF leakage when powered by AC Mains?*

### 1 ISOLATION TRANSFORMER



Implementing a large Input AC-AC Isolation Transformer is one of the methods that can be employed to achieve CF leakage in medical devices. However, the large transformer size can make it difficult to incorporate into the device and it can be costly.



### 2 DC-DC ISOLATION

Expensive and bulky downstream in-circuit DC-DC isolation. The components required for this method can be costly and large in size, making it challenging to incorporate into the device.

### 3 AC-DC CF POWER SUPPLY



ASM Series power supplies meet CF leakage where only Class A EMC is needed and if the input is Class I Earth grounded. This approach is generally more compact and lightweight, making it easier to incorporate into the device. generally more compact and lightweight, making it easier to incorporate into the device.

[www.AstrodyneTDI.com](http://www.AstrodyneTDI.com)