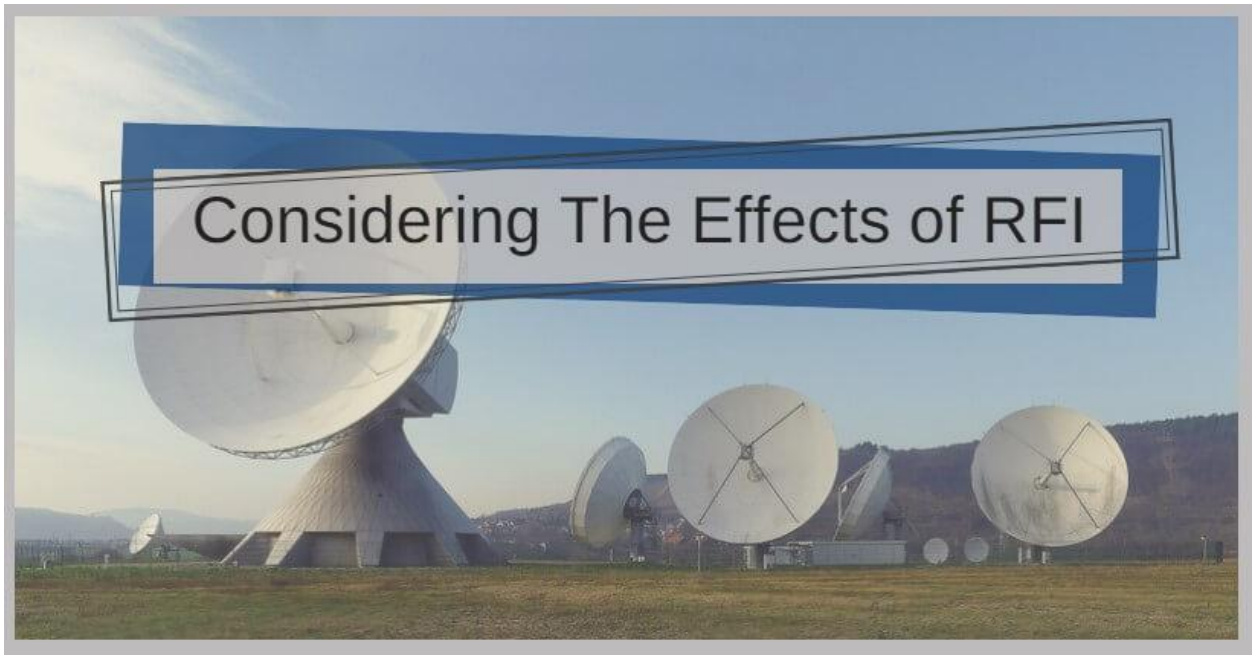
The Effects of RFI - Radio Frequency Interference Shielding



RFI is a complex concept that's critical to understand when designing and using electronic products. RFI stands for radio frequency interference, invisible electric noise that emanates from high-frequency electronics causing interference and performance issues with other devices. With the dramatic rise in new electronic technology over the past few decades, the amount of RFI in most populated environments has multiplied many times over.

Everything from computers, processors and medical devices to lamp dimmers, remote controls and video game consoles are susceptible to RF interference. To combat this modern design challenge, electronic engineers utilize RFI shielding techniques to minimize and contain radio frequency interference while creating a seal that blocks out disruptive and corrosive waves.

Frequently Asked Questions About RF Interference

Radio frequency interference is a term for a type of interference that impacts how electronics are made and used. The following are some of the most common questions on RFI.

Is RFI the same as EMI?

Electromagnetic interference (EMI) is the result of electromagnetic emissions from manmade electronic products as well as natural sources. EMI is referred to as RFI when the frequency of the wave is on the radio spectrum.

Why does RFI cause problems with electronics

An electronic device such as a garage door opener transmits within a specific frequency range. The presence of radio frequency interference temporarily alters the frequency range, causing the device not to work correctly.

Where does radio frequency interference come from?

RFI is emitted by both wired and wireless electronic components including motors, controllers, power supplies, switches and many other devices that generate interference.

What is RFI shielding?

RFI can be mitigated by a product design that utilizes RFI shielding to protect internal components. Shielding gaskets, wiring layouts, grounding planes and other techniques are used in conjunction to protect equipment from corrosion.

Dealing With RFI

Left unchecked, RF interference causes performance issues and malfunctions in a broad variety of devices. Product designers and engineers combat this phenomenon by using RFI shielding to create a protective seal so electronic devices can operate at the appropriate frequency without disruption. With modern advancement, shielding methods have become more prevalent and attainable in forms ranging from acrylic sprays, laminates and tapes that apply to enclosures, as well as a variety of shielding gaskets typically made of rubber and foam.

Learn More About RFI Shielding

JEMIC Shielding Technology specializes in offering products and services that address your most challenging RF interference issues. Located in the Harrisburg, Pennsylvania, area, we manufacture and distribute an extensive selection of solutions from gaskets and shielding laminates to RF shielding pouches. From competitive prices to custom designs, weâ€™re the single, reliable source for everything you require.

Contact us today for additional information and to request to speak with a knowledgeable member of our team.