In response to the ever-increasing performance demands of modern electronic circuits, circuit board densities continue to grow and component lead spacings continue to shrink. Because these geometries are so small, the susceptibility of circuits to adverse effects of corrosive environments in industrial settings is higher than it was only a few years ago. Much smaller defects are now capable of causing failures.

At the same time, environmental concerns and regulations worldwide have prompted manufacturers to convert their electronic assembly processes to reduce or eliminate the use of lead. Unfortunately these same lead-based compounds were a major component in improving the resistance of the finished products to corrosion in certain kinds of environments.

In recognition of these industry changes, and in an effort to offer an even better product to certain 2500 Series™ System installations, we now offer a conformal coating option on our 2500 Series™ products.

Conformal Coating FAQs

What does the conformal coating do for me?
Conformal coating protects the circuitry from moisture, fungus, dust and corrosion caused by extreme environments. It also reduces possible damage from handling during construction, installation, and use.

How do I know if I should order conformal coating?
If you’re worried about the effects of dust, moisture, and corrosion, particularly if the environment where your equipment is installed has levels of \( \text{H}_2\text{S} \), \( \text{SO}_2 \), \( \text{CL}_2 \), or \( \text{NO}_2 \) in concentrations above the following levels:

- \( \text{H}_2\text{S} > 10 \text{ ppb} \)
- \( \text{SO}_2 > 1000 \text{ ppb} \)
- \( \text{CL}_2 > 2 \text{ ppb} \)
- \( \text{NO}_2 > 125 \text{ ppb} \)

ppb = parts per billion

If my modules are conformally coated, can they operate in a wet environment? No. The conformal coating improves the resistance of the product to severe environments. It is not intended to be a waterproof coating.