

# *Enclosures for Your Reality eBook*

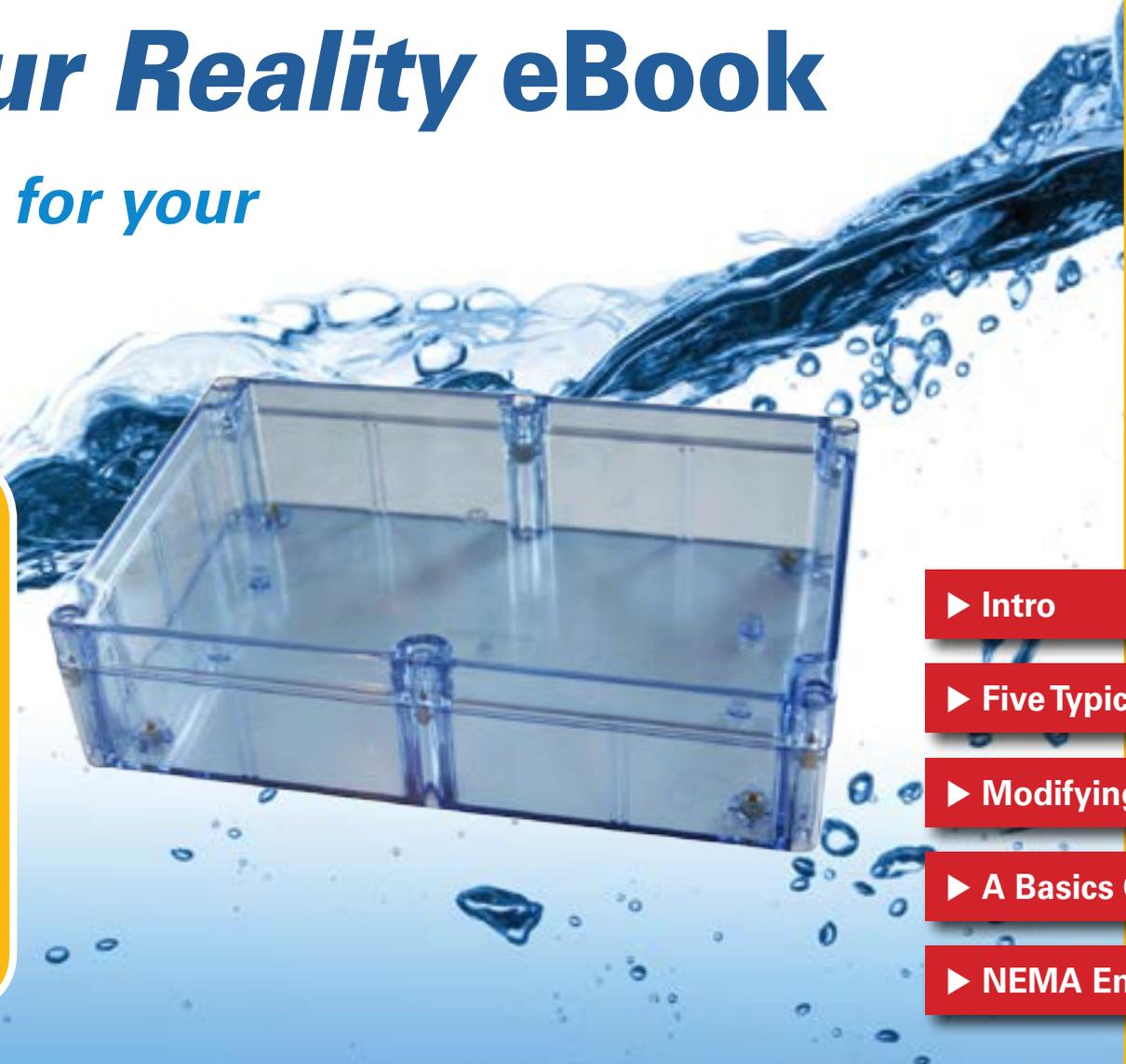
*How to get the right enclosure for your application when you need it*

## **INSIDE:**

**Play the EXTREME ENGINEERING QUIZ!**

Engineers have little time to find the ideal enclosure. You need enclosures that can be modified fast and shipped fast and that can protect your designs, even in extreme environments. That's your reality.

How smart are you about the harsh realities of extreme engineering? Take our quiz and see.



▶ Intro

▶ Five Typical Mistakes

▶ Modifying Enclosures

▶ A Basics Guide

▶ NEMA Enclosures

## Five Mistakes in Specifying an Outdoor Enclosure

As more electronic equipment is being used outdoors to control everything from sprinklers to lighting, power to insect control, and energy to traffic flow, the use of outdoor enclosures is becoming more important than ever.

Yet the enclosure is an often overlooked component. As the engineer is designing a unit to control outdoor equipment, connectivity issues are often overlooked because of the rush to get the product to testing or just because enclosures can be “taken for granted” as they’re a low-tech item. Therefore, this article offers a list of the five typical mistakes made by engineers in specifying an outdoor enclosure.

[Read More >](#)

## EXTREME ENGINEERING QUIZ #1

Clemson University’s test facility pushes the limits of wind turbines with hurricane-force. During testing, blade tips spin up to:

- A. 74 miles per hour
- B. 156 miles per hour
- C. 190 miles per hour



### Watertight

Achieve IP68 with Bud’s IPS Series die cast box.

[Watch Video Demonstration](#)

▶ Intro

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## How to Modify Enclosures for Less Time and Cost

Although enclosure suppliers can typically turn around modifications in 10 to 15 days, the most efficient ones can complete simple modifications in as few as five days with no charge for expediting.

With a little planning and coordination with the right supplier, product designers can get their creations to market faster with exactly the enclosure their design requires.

Here are a few tips that can speed and simplify the enclosure modification process.

[Read More >](#)

## EXTREME ENGINEERING QUIZ #2

Researchers aim to develop a Li-S battery that will operate at  $-80^{\circ}\text{C}$ . The lowest temperature ever recorded for Antarctica was...

- A.  $-45^{\circ}\text{C}$
- B.  $-94^{\circ}\text{C}$
- C.  $-133^{\circ}\text{C}$



## Modifications in Five Days

Watch the steps to five-day delivery on modified enclosures.

[Watch Video >](#)

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# A Basics Guide to Cabinets and Enclosures

The selection of a cabinet, enclosure, or other packaging for an electronic product presents the designer or systems integrator with a variety of choices, in addition to certain criteria that will be dictated by the nature of the application. This article summarizes the basic types of cabinets and enclosures available in the marketplace today, along with some of the more important issues of packaging for electronic systems and products.

Using this information, designers can begin to evaluate their options quickly so they can focus on selecting the optimum solution for their applications. Remember, many enclosure solutions can be delivered with custom features or modifications that tailor them precisely to a particular application.

[Read More >](#)

## EXTREME ENGINEERING QUIZ #3

How large would a wind farm have to be to power New York City?

- A. 2 square miles
- B. 12 square miles
- C. 40 square miles



### ATEX

ATX Series explosion-proof enclosures provide safety for designs and workers.

[See Specs >](#)

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# Choosing the Right Material for Your NEMA Enclosure

Economical NEMA enclosures are available in a wide variety of materials, including plastic, die-cast aluminum, steel and aluminum sheet metal, and fiberglass.

Each type of material has its pros and cons, and it's an important decision because it determines how and where the device can be used. The choice of material depends on the application, budget, and degree of customization required.

[Read More >](#)

## EXTREME ENGINEERING QUIZ #4

Bud enclosures offer extreme protection. Bud's AN Series is rated IP68, suitable for...

- A. Factory washdown
- B. Dusty outdoor environments
- C. Submersion for extended time
- D. All of the above

### IP66 with Style

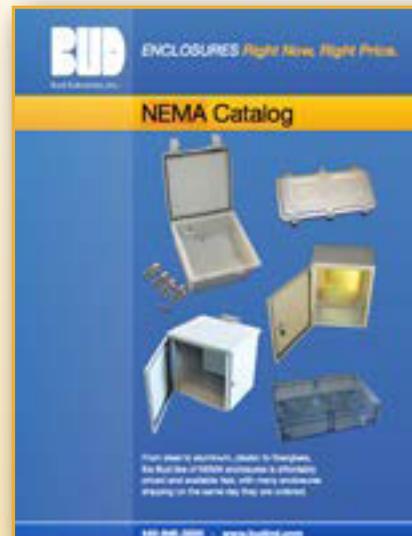
EXN Series extruded-aluminum enclosure combines protection, style, and a great price.

[See Specs >](#)



### Bud NEMA-rated enclosures

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