

## Bring ideas to life with design visualization

#### **Benefits**

- · Free, easy access to next-generation visualization
- Experience true-to-scale 3D models in real-world settings
- Communicate intent in the design's physical environment
- Assists in design collaboration

#### **Features**

- True scale digital prototype imposed on the physical world
- Interactive AR experience using tablets and smartphones
- Secure cloud-ready design sharing
- Export to other third party augmented, virtual and mixed reality solutions via OBJ format

#### Summary

Siemens Digital Industries Software's Solid Edge® software delivers a next-generation method to visualize design intent by incorporating augmented reality (AR) to its 3D computer-aided design (CAD) product line. AR is a technology that can place virtual objects in real-world settings, with endless applications.

With Solid Edge Augmented Reality, access to next-generation visualization has never been easier. Solid Edge Augmented Reality allows users to connect the digital environment with the physical world by displaying 3D CAD data models as actual products. It allows a design to be showcased in a compelling way, even before it is built, using any common smartphone or tablet. The experience can be shared securely via the cloud using the Solid Edge Portal or viewed offline.

Manufacturers stand to realize significant benefits from AR acceptance in the marketplace. AR lets prospective buyers visualize products true-to-scale, or scaled down for larger products, anywhere, using a next-level digital prototype. This can provide confidence in a product's intended look and feel without the product leaving the manufacturing floor. AR delivers on the promise of

a digital twin, a digital model in its intended physical environment.

AR is also ideal for design reviews. An accurate representation of the product's size/shape helps clients and colleagues understand how the product best suits its intended environment. Furthermore, thanks to the Solid Edge Portal's ability to securely share the AR experience, these benefits can be realized at any distance. Geographically disperse teams can now better understand what their colleagues are working on and provide informed assistance. Implementation benefits include reduced time-to-market and cost, improved quality and increased productivity.

Solid Edge can also export object data translation files (OBJ files) to other augmented, virtual and mixed-reality (AR/ VR/MR) experiences through third-party systems. Widely considered to be a universal format for 3D image editing applications, an OBJ file is a standard 3D image format containing 3D coordinates, texture maps, polygonal faces and other object information.

#### Creating the augmented reality

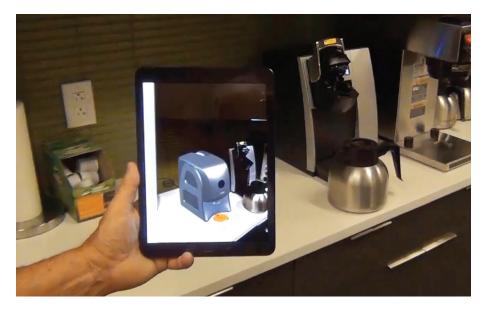
Sign in to the free Solid Edge Portal (www.solidedgeportal.com), upload your CAD model and, with a simple click, share the project with a collaborator. You or the collaborator can then download the model to a mobile device and open in Solid Edge Viewer (available from device's App store). Entering AR mode allows you to place the model on a surface in your environment, and walk around your model, all in context. You can push into the model to see internal components such as circuit boards,

# Solid Edge Augmented Reality

wiring, and mechanical components, or even look outwards from within the model. The downloaded model will remain accessible for offline usage.

### **Extending value**

Solid Edge is a portfolio of affordable, easy to deploy, maintain and use software tools that advance all aspects of the product development process: mechanical and electrical design, simulation, manufacturing, technical documentation, data management and cloud-ready collaboration.





The Augmented Reality enabled Solid Edge Viewer allows you to move around or into a 3D-generated model in its real-life setting.

Siemens Digital Industries Software siemens.com/software

Americas +1 314 264 8499 Europe +44 (0) 1276 413200 Asia-Pacific +852 2230 3333