



## PORTABLE DATA ACQUISITION, MEASURING & SENSING DEVICES

### The Need for 'Ruggedization'

Portable Data Acquisition Devices such as scanners, tag readers, sensors and computing devices are often required to be 'ruggedized' – maintaining full functionality in outdoor conditions, food freezers, shipping terminals and warehouses with broad temperature extremes and moisture conditions. These units are either held-held, belt-suspended, mounted in a cradle or combinations of any of the above.

### Sealing and Cushioning of Scanners and Readers

Stockwell Elastomerics regularly assists mechanical engineers in this growing and innovative business sector. Battery cover gaskets, door gaskets, and touchscreen gaskets are often fabricated from Poron® cellular urethane and silicone sponge. Thermal interface pads may be required for devices with higher power requirements. Smaller, battery-powered devices may require internal cushioning pads, such as in the battery compartment, to maintain power and functionality if the unit is dropped during use. Heavier devices may require a molded shock absorber to protect an LCD assembly or similar fragile component in the device. From our experience, the gaskets and

cushioning pads are often the last components specified – and our sampling and prototyping capabilities exist to support this need.

### Protection of Air and Chemical Monitoring Sensors

Air Monitoring and Chemical Analysis Devices are no longer just used in the laboratory under ideal conditions. Designers are ruggedizing these devices for monitoring and reporting chemical spills and protecting first responders. These devices often require molded seals and heavier shock isolation capability to survive the punishment one might expect in emergency situations. Flame-rated and high temperature silicone rubber often replaces neoprene sponge and Poron® cellular urethane for these gasket applications.

### Water Jet Cut Prototypes

The accumulated production tolerances of molded plastic housings, doors and covers may cause situations where the original gasket concept has to be changed. Our water jet capability exists to support your requirements for fast turn gasket samples prior to the start of production. We inventory a broad range of gasketing and cushioning materials to support our rapid response to these common situations.