Redfish Instruments’ New Apple Enabled Multimeter

3D System

Redfish Instruments’ new iDVM device is the world’s first Apple iPhone, iPad, and iPod-touch enabled digital multimeter, which wirelessly transmits voltage, current, and resistance measurements back to the user. Control of the iDVM is handled remotely by a free, downloadable application that resides on the mobile device. Redfish is currently the only company offering a multimeter iPhone app.

While designing the enclosure for the iDVM device itself, Redfish was able to benefit from the full range of solutions provided by Quickparts. After placing separate orders for SLA prototypes and pre-production cast urethane parts, Redfish selected Quickparts® to produce its production tooling and deliver production quantities of injection molded parts.

"From the personal follow up on our prototypes through the design for manufacturability analysis we received, Quickparts was the logical, user-friendly choice to handle all of our requirements," said Patrick O’Hara with Redfish. "We couldn’t have done it without the great teamwork we experienced with Quickparts."

Challenge

Redfish had created an initial design for the iDVM device, but needed to find a vendor who could provide them with functional prototypes for review and testing. “We needed to begin with some prototype versions to help us confirm the design, before ultimately moving on to sourcing the production parts,” said Patrick O’Hara with Redfish.

Solution

O’Hara began by using the Quickparts online instant quoting engine, QuickQuote®, to quote and buy the order for the initial ABS-like, black SLA prototypes for the top

and bottom of the design case. After performing fit and form testing, Redfish, along with help from Quickparts engineers, implemented design revisions and moved on to a second order of pre-production Cast Urethane parts that allowed them to further test design, color, functionality, and finish texture.

When the time came to produce the final production parts for the case, Redfish again turned to Quickparts for the Low Volume Injection Molded parts they needed. Today, production quantity components for the iDVM are molded out of UL94V0 black ABS off of aluminum injection molds with Quickparts. "From the personal follow up on our prototype projects, all the way to the Design for Manufacturability analysis we received with our molded parts, Quickparts continued to be the easy and logical choice to handle each phase of our production," said O'Hara.

Benefits

Redfish was able to directly benefit from the full "Prototype to Production" capabilities at Quickparts. Utilizing a single vendor, Redfish was able to move the iDVM device all of the way from concept through to production. "The fantastic speed and service we received allowed us to easily navigate through the entire developmental process of the plastic components," said O'Hara. "We couldn't have done it without the great teamwork we experienced with Quickparts."

For more information visit www.redfishinstruments.com [1] or www.3dsystems.com [2].

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