

The Finishing Touch

Martello Limited, the south of England's premier prototyping bureau recently saw the fruit of their labours when one of their customer's products went to market. Martello are well known for their services of rapid prototyping, finishing and Thin-Rim® vacuum casting for prototyping and production.

Lascar Electronics Ltd came to Martello for help prototyping their new EL-USB-2-LCD Temperature and Humidity Data Logger, a handheld device which sells for under £60.00. Typical applications are building monitoring, (heating, ventilation, air-conditioning), fridge monitoring (food storage), transport and horticulture/agriculture, (e.g. monitoring temperatures of green houses.)



EL-USB-2-LCD Data Logger by Lascar Electronics Ltd

"The EL-USB-2-LCD represents a significant step forward for the Lascar EasyLog range" says Pete Cross, Sales & Marketing Director of Lascar Electronics, "The addition of the display, rolling mode and push-to-start options should open the product up to further applications and offer more flexibility in how the product is used to those already familiar with the range."

Martello built rapid prototype SLA models of the EL-USB-2-LCD in water-shed resin using their in house 250 SLA machine. These prototypes were used for design verification and were then assembled as fully working models. One set of models were then rubbed down and painted by Martello's expert model making team working to the customer specification of surface finish and colour (RAL or Pantone references.) Using silk screening or Decal kits for logo transfers an extremely good replica of the final product can be achieved. Martello offer a range of prototyping technologies including SLA,

SLS and polyurethane resin piece parts; therefore they analyse each project to ensure that the prototypes are made using the most suitable technology that will give the best parts in aesthetics, accuracy and cost.

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The Data Logger that Martello built is 126mm long, 25.3mm

wide and 24.1mm depth, an ideal size for building on a 250 SLA machine at 0.1mm resolution. As with most new products, there were several iterations of the design, and by using technologies such as CAD and rapid prototyping Lascar's design team were able to develop their ideas at minimal cost to produce this fantastic new product.

The EL-USB-2-LCD temperature and humidity data logger is the most recent addition to Lascar Electronics' EasyLog USB range of stand-alone data loggers. It is the first in the range to feature a built in display which provides indication of minimum, maximum and last

stored temperature and humidity readings at the touch of a button; in addition to the display Lascar has also added a rolling mode and push-to-start option.

The EL-USB-2-LCD records temperatures from -35 to +80°C and relative humidity from 0 to 100% at user defined intervals using a combined sensor in the base of the unit; power is supplied from a 3.6V 1/2AA lithium cell which will typically provide 6 or more months of use. Lascar's proprietary software, which is included free of

charge with each data logger, uses an intuitive 'wizard' based approach that makes setup and download of the EL-USB-2-LCD particularly straightforward.



Martello's 250 SLA Machine

The software for the EL-USB-2-LCD can be easily installed on Vista (32 bit), Windows 2000, and XP (Home and Professional Editions) and allows users to set up and download data from any EL-USB product.

The EL-USB-2-LCD Data Logger is available immediately from Lascar Electronics, and it's resellers at £59.95 including software and battery. For more information about the EL-USB-2-LCD and the EasyLog USB range of data loggers visit Lascar's website at www.lascarelectronics.com

For more information about how Martello can help you prototype your new product visit their web site at www.martello.co.uk

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Martello Limited
14 Allens Lane
Hamworthy
Poole
BH16 5DA

www.martello.co.uk
Tel: 01202 628470
e: sales@martello.co.uk