

APPLICATION STORY

FLIR ETS320 speeds up repair work at ISOMEDIA

ISOMEDIA is a leading after-market service company for mobile devices in southern Germany. The business was launched in 1995 as a pc and mobile phone repair center in Stuttgart. Today ISOMEDIA uses a FLIR ETS320 to speed up their repair work.

Since 2013, ISOMEDIA has been an authorized customer service provider and repair center for leading mobile device brands in Germany, with the capability of Level 3 component level repairs with high-end soldering machines and calibration instruments. As of 2017, ISOMEDIA is a top provider of customer carry-in repairs for the leading brands. In many cases, clients get the same-day repair service for their mobile devices at ISOMEDIA.

THERMAL IMAGING HELPS TO SPEED UP THE REPAIR

In order to speed up their repair work, ISOMEDIA discovered infrared thermography. They purchased a FLIR T420 to check PBAs. PBA stands for Printed Circuit Board Assembled (PCB with parts soldered). The FLIR T-Series was, and still is used, to see the temperature flow on the PBA and analyse what is happening.

"Thanks to the FLIR T-Series, we are able to locate the problem and analyse what is happening in the PBA," says Nicolas Marsot, Technical Engineer at ISOMEDIA. "We like

the FLIR T420 because it has a thermal and a visual image. We can show the customer what is happening with great image quality. Thanks to FLIR Tools we can also analyse the thermal images."

In 20 percent of the cases the problem is indeed to be solved by replacing a part of the PBA. In most cases the PBA needs to be replaced completely. "Of course, it is also good to know if the problem is not located in the PBA," explains Nicholas.

A NEW AND EXCELLENT TOOL: FLIR ETS320

Although the FLIR T420 is a great tool we are today using a new generation of thermal imaging cameras from FLIR," Nicholas continues.

The FLIR ETS320 is a non-contact thermal measurement system that pairs a high sensitivity infrared camera with an integrated stand, for hands-free measurement of printed circuit boards and other small electronics. Nicholas explains why the ETS320 is so



FLIR ETS320



Nicolas Marsot, Technical Engineer at ISOMEDIA, explains the use of thermal imaging and the FLIR ETS320.



Vincenzo Ragusa, CEO of ISOMEDIA, explains the value of the FLIR ETS320 visualizing the heat in PBAs.



Overview of the facilities at ISOMEDIA.



FLIR ETS320 inspecting a PBA at ISOMEDIA.

FLIR ETS320™

Thermal imaging system for electronics testing

Whether the goal is product testing, product repair or research and development, heat can be an important indicator of how a system is functioning. The FLIR ETS320 is a non-contact thermal measurement system that pairs a high sensitivity infrared camera with an integrated stand, for hands-free measurement of printed circuit boards and other small electronics.

The FLIR ETS320 takes the guesswork out of thermal testing for fast discovery of hot spots and potential points of failure. This sensitive camera detects minute temperature shifts ($< 0.06^{\circ}\text{C}$) and quantifies heat generation up to 250°C .

The ETS320 offers 76,800 points of non-contact measurement (320x240 pixels), so that those who need to test or repair a product, can locate hot spots without concerns about unseen heat sinks. Temperature measurement accuracy of $\pm 3^{\circ}\text{C}$ helps to ensure products attain quality assurance and factory acceptance.

FLIR designed the ETS320 for hands-free use in a lab, with a microscope-style stand that's quick to set up and simplified features that allow researchers to focus on their work instead of on camera controls. Moreover the FLIR ETS320 is very easy to move from one bench to another.

FLIR ETS320 features:

- Non-Contact Measurement
- High Measurement Accuracy
- Wide Temperature Range
- Quantifies Heat Generation and Thermal Dissipation Up to 250°C
- Hands-Free Measurement
- Visual Confirmation of Heat

For more information, please visit
www.flir.eu/ets320



important to the work at ISOMEDIA. "It's a very easy-to-use tool because it reveals, quickly, what is the problem on the PBA. This is very important to us because within a very short time we can troubleshoot if there is a problem with the PBA and what that problem is."

He continues, "The FLIR ETS320 clearly visualizes hot spots on the PBA. At ISOMEDIA, we value our time, so if we have something like the ETS320, that is perfect for us. It speeds up the repair work tremendously. It's also easier to use for this type of work."

Nicholas explains, "Although the T-Series we have is movable, it's fixed to a mount in our facility. The ETS320 is very mobile and we can easily share it among multiple technicians when necessary."

"Also, the price of the ETS320 is a real advantage for us. We can put multiple units at work if necessary."

Nicholas concludes, "We use the power of thermal imaging on a daily basis. Thermal imaging, and in particular the FLIR ETS320, helps us do our work faster and provide the excellent and fast service to the customer that ISOMEDIA is known for."

For more information about thermal imaging cameras or about this application, please visit:

www.flir.com/science

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