



## APPLICATION STORY

### Thermal imaging experience and technology improve company's competitiveness and performance

The FLIR T640 thermal imaging camera and FLIR Test & Measurement Tools, in combination with METERLiNK® technology, prove to be invaluable tools for an Italian consultant service

*Thermal imaging can be decisive in many fields and, as Corrado Ciuti, the owner of the professional practice Termogramma, says, its application is only limited by the imagination. The level of technology available also makes the difference: to provide consultancy services and inspections with the utmost authoritativeness, Termogramma relies on a full range of feature-rich tools. From the FLIR T640 thermal imaging camera, to high-tech clamp meters and moisture meters, the tools Ciuti employs are compatible with FLIR Tools+ software so he can provide the highest quality services.*

It is simplistic to use thermal imaging only to confirm that a problem exists. Indeed, it is a predictive technique that helps prevent problems from arising and remedy their consequences before they occur, thus saving time and money. It is no coincidence that Corrado Ciuti, dba Termogramma, is increasingly offering consultancy services that provide thermal measurements as a proactive measure. Based in Monterubbiano, near Fermo, Termogramma is an EN ISO 9712 certified company and has been performing inspections for civil, electrical, mechanical, and industrial customers since 2012. Corrado Ciuti is a demanding professional who finds FLIR's solutions to offer the best balance between the abundance of features and actual product performance.

#### A BROAD RANGE OF USEFUL FEATURES

Termogramma's customers are in several fields, starting with construction. "The inspections

I am asked to perform are commissioned by private individuals and professional firms who need immediate answers to problems that affect housing units or residential complexes," explains Ciuti.

"Using the thermal imaging tools I have, I can identify the source of water leaks, pinpoint problems in the thermal insulation systems or threats to the safety of the buildings. I collaborate with architects and engineers also by carrying out inspections for legal disputes," he says.

Photovoltaics is a rapidly growing field for Termogramma. "My services are requested both to comply with statutory certifications requirements and to assess existing installations," adds Ciuti. Thanks to the thermal imaging cameras, Ciuti can check the panels and other components for defects and malfunctions, starting with transformers and disconnectors.



FLIR T640



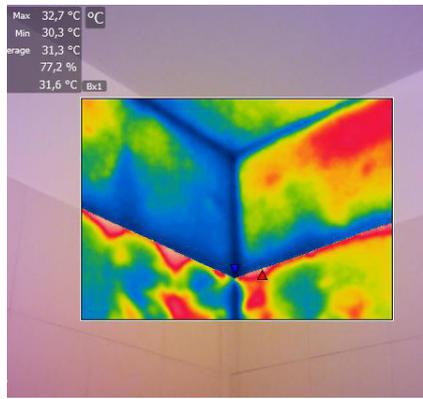
Thermal image in the electrical field for diagnosing a contactor with defective contacts.

#### ALWAYS USED FLIR

Ciuti's profession is validly supported by FLIR's thermal imaging solutions. "I started out in my profession with a FLIR E6 thermal imaging camera and as my working complexity increased, I added the model T640, which is currently the spearhead of my equipment range," explains Ciuti. The T640 is equipped with METERLiNK® technology, which allows



By choosing the FLIR T640, Termogramma achieved a higher level of thermal imaging investigation and unparalleled advantages.



The use of thermal imaging in the construction industry helps detect problems related to the formation of condensation and mold.



Termogramma has always placed FLIR thermal imaging cameras at the center of its business.

Ciuti to append inspection data to thermal images or send it directly to the FLIR Tools App on a mobile device. With this added technology, Termogramma can further specialize in predictive analysis in the electrical and photovoltaic fields to support requests for tax benefits.

The data collected using the FLIR CM85 clamp meter and the FLIR MR77 moisture meter can be sent directly to the camera via the METERLiNK Bluetooth connection, eliminating the risk of human error and saving valuable time. "With the same equipment, in buildings and homes, we can measure humidity and temperatures so as to block the source and spread of mold and condensation," says Ciuti. By choosing the FLIR T640 Termogramma achieved a higher level of thermal imaging investigation and unparalleled advantages. "The T640 combines high resolution with high sensitivity, factors that make a difference in my work," he says.

In addition to these services, the company is also equipped with a range of accessories and features that help improve Termogramma's work also during particularly complex investigations.

Features such as the touch screen or the possibility of adding information and voice annotations raise the T640's efficiency to the highest level. "It takes a lot of time to

carry out checks and take notes during measurements," Ciuti explains. "Having such an efficient machine that integrates several functions into a single device amounts to a real quality leap."

#### TOWARDS THERMAL IMAGING 4.0

To complete their instrumentation, Termogramma has chosen to upgrade to the plus version of FLIR Tools, the software that provides thermal imaging professionals with a complete set of controls, all in an effective platform that can generate highly detailed reports on the work done.

While the standard version can be downloaded from the website, FLIR Tools+ adds value to FLIR products with presets and templates to produce the documentation required. Ciuti explains, "FLIR Tools+ interfaces with the Microsoft Office suite, to enrich and accompany reports. The plus version also makes it possible to create dynamic radiometric videos and, with its panorama functionality, can show a single scan of large surfaces such as the façade of a building, which is a very useful feature in the construction industry."

#### FLIR IS ALSO CERTIFICATION

Termogramma confirmed its professionalism by achieving second level UNI EN ISO 9712 certification, after Ciuti attended a course offered by the Infrared Training Center (ITC). As the infrared training arm of FLIR Systems, the ITC provides practitioners with the qualification required by European regulations and needed to offer services in this field.

Through ITC, FLIR offers one- and two-day introductory courses or first, second and third level certification courses. "The ITC training course enabled me to certify my professional background to do my job better," Ciuti concludes. "Thanks to the training offered by FLIR and the collaboration of Roberto Rinaldi,

the Italian coordinator of the ITC courses, I was able to enhance my knowledge of thermal imaging and of all the best practices to make the best use of FLIR's solutions."

#### FLIR T640 in brief

The FLIR T640 is a high-performance thermal imaging camera with a built-in 5 MP visual camera, interchangeable lens options, autofocus, and a large 4.3" LCD touchscreen. This camera combines ergonomics with image quality and advanced features.

The high IR resolution for its class allows it to record accurate temperature measurements from far away, while the manual control and the speed of the autofocus allow maximum sharpness, accuracy and efficiency.

The T640 offers built-in GPS and compass technology, which automatically adds geolocation data and camera direction to the images you want to include in your reports.

Images and data can be exported quickly, and with FLIR Tools Mobile for Apple® and Android™, you can share critical information via Wi-Fi with smartphones and tablets.

METERLiNK technology allows vital diagnostic data to be transmitted wirelessly from clamp meters and moisture meters directly to the camera, and measurements can be enriched with voice comments and text notes, and the camera can directly produce PDF documents.



FLIR CM85 and MR77

More about FLIR Systems and our products can be found at:

[www.flir.eu](http://www.flir.eu)

The images displayed may not be representative of the actual resolution of the camera shown. Images used for illustration purposes only.

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