Teledyne FLIR Introduces Hadron 640R Dual Thermal-Visible Camera for Unmanned Systems

Teledyne FLIR's Hadron 640R radiometric thermal and visible dual camera module. *TELEDYNE FLIR*

GOLETA, Calif. and ORLANDO, Fla. – Teledyne FLIR announced the release of its high-performance Hadron 640R combined radiometric thermal and visible dual camera module on April 25.

The Hadron 640R design is optimized for integration into unmanned aircraft systems, unmanned ground vehicles, robotic platforms and emerging AI-ready applications where battery life and run time are mission critical.

The 640 x 512 resolution Boson longwave infrared thermal camera inside the Hadron 640R can see through total darkness, smoke, most fog, glare, and provide temperature measurements for every pixel in the scene. The addition of the high definition 64 MP visible camera enables the Hadron 640R to provide both thermal and visible imagery compatible with today's on-device processors for AI and machine-learning applications at the edge, the company said.

"The Hadron 640R provides integrators the opportunity to deploy a high-performance dual-camera module into a variety of unmanned form factors from UAS to UGV thanks to its incredibly small size, weight, and power requirement," said Michael Walters, vice president product management, Teledyne FLIR. "It is designed to maximize efficiency and its IP-54 rating protects the module from intrusion of dust and water from the outside environment."

The Hadron 640R reduces development costs and time-to-market for integrators and original equipment manufacturer product developers by offering a complete system through a single supplier, Teledyne FLIR. This includes offering drivers for market-leading processors from NVIDIA, Qualcomm, and more, plus industry-leading integration support and service from a support team of experts. It also offers flexible 60 Hz video output via USB or MIPI compatibility. Hadron 640R is a dual use product and is classified under U.S. Department of Commerce jurisdiction.