

SPECIM Depicts Targets Invisible to the Human Eye - Next Gen Chemical Imager Reveals Camouflaged and Hidden objects

8 June 2011 SPECIM, Spectral Imaging, Ltd., announces that it has successfully delivered the world's most compact, high-performance Long-Wave Infrared, LWIR Hyperspectral Imager to a Defence Customer in a strategic geographical location. The advanced chemical imaging capabilities will bring a new dimension to port and harbour airborne surveillance, and additionally to other defence and law enforcement applications. The strength of the technology is in unveiling hidden or camouflaged materials, objects and actions. The complete delivery encompasses a state-of-the art AisaOWL thermal infrared hyperspectral camera, related software solutions, and a service contract. The system delivery took place in May 2011.

Thermographic and Forward Looking Infrared, FLIR cameras have been used widely for defence and law enforcement solutions. Thermal imaging is the technology that enables the detection of warm objects against a cold background even in completely dark conditions. Thermal Infrared systems can see through smoke, fog, haze, and other atmospheric obscurants better than a visible light camera can.

The SPECIM AisaOWL operates similarly to a traditional thermographic camera, with the fundamental difference that each pixel additionally contains a full LWIR spectrum, unique to the molecular structure of the target. The measured infrared spectra can then be used for material identification of the objects depicted. Consequently, a single instrument can deliver reliable chemical and thermographic object recognition without the need for a light source such as the Sun or the Moon, which is a major advantage in target recognition, surveillance, and other defence applications.

The SPECIM AisaOWL provides invaluable information in airborne chemical imaging, including geological exploration, pollution source identification, and defence applications. The fact that US principal special forces the Navy SEALs have reportedly used hyperspectral imagers in such high stage operations as Neptune Spear, has proved the strategic importance of the technology, and raised world-wide interest towards the capabilities of thermal hyperspectral imaging in defence and law enforcement.

In February 2011, SPECIM's AisaOWL was recognized by Frost & Sullivan as the World First Thermal Hyperspectral Camera for Unmanned Aerial Vehicles¹. The sensor's low weight and compact size is also one of the attractions of AisaOWL for the majority of SPECIM customers, as it allows for quick and easy installation in any aircraft, helicopter, or Unmanned Aerial Vehicles UAVs.

For further information about the AisaOWL manufacturer, SPECIM, please visit www.specim.com For more information about AisaOWL and to order your free set of sample data, please contact AISA Product Manager, Mr. Petri Nygrén (petri.nygren@specim.com) or info@specim.com (tel. +358 505112233 or +358 10 4244 400).

¹ Frost & Sullivan, Aerospace and Defence Technology Insight, Feb 2011