



September 5, 2023

ProPhotonix Limited

("ProPhotonix" or "the Company")

New RGB-SWIR COBRA MultiSpec LED Line Lights Now Available

New high-performance multispectral light enables moisture and plastics detection in food sorting applications.

ProPhotonix Limited, a designer and manufacturer of laser diode modules and LED illumination systems with operations in Ireland and the United Kingdom, part of the Exaktera group, is pleased to announce the addition of a new standard configuration to its innovative COBRA™ MultiSpec LED line light product range - RGB-SWIR multispectral LED lights.

Incorporating 5 different wavelengths – 445nm, 532nm, 630nm, 1150nm, and 1450nm, this [COBRA MultiSpec RGB-SWIR](#) is an ideal solution for system designers in the food industry. The RGB wavelengths have been selected to provide identification or characterization in the visible part of the spectrum. The SWIR wavelengths selected are well-suited to the detection of moisture in products such as rice or grains, as well as the identification of many different forms of plastics that may occur as contaminants in the food sorting process. SWIR wavelengths can also be used to differentiate between organic and inorganic matter both within the food sorting process and package inspection industry. These wavelengths are also ideal for silicon wafer inspection.

The new multispectral line light can be used in systems with two cameras, a standard prism-based RGB camera, a bilinear or trilinear camera in combination with a SWIR camera. Alternatively, it can be used with a single 4-sensor camera targeting both the visible and SWIR part of the spectrum. With the addition of both RGB and SWIR wavelengths on the same line light, there is now significant potential to simplify and reduce the overall cost of the imaging system.

Built on the established COBRA Slim platform, the compact COBRA MultiSpec can be configured with up to 12 wavelengths all incorporated into one 100mm unit without compromising on uniformity. Its use of Chip-on-Board LED technology allows much higher packing density than with competing products and ensures excellent uniformity and high intensity. [COBRA MultiSpec](#) is a modular product and is available in lengths up to 6m. Via its user-friendly GUI, COBRA MultiSpec offers users the ability to tailor the output to maximize contrast in their application. COBRA MultiSpec is a complete solution with integrated strobe and Ethernet control in a form factor designed to optimize space in multispectral imaging systems.

A key advantage of LED technology over traditional light sources is the lifetime of LED products and ProPhotonix's COBRA Slim product has operated successfully in the field for more than ten years. The platform can be configured or customized to different application needs.

Simon Stanley, Director of Technology at ProPhotonix (IRL), said "We are pleased to announce the addition of the RGB-SWIR multispectral light to the COBRA MultiSpec range. Multispectral imaging applications are growing rapidly and ProPhotonix's LED technology is well placed to support this growth. We appreciate that multispectral applications can vary significantly in their requirements. The COBRA platform is highly configurable and can be tailored to a wide range of application needs."

For more information, visit: <https://www2.prophotonix.com/COBRA-RGB-SWIR>

Contact:

ProPhotonix Limited

Simon Stanley, Director of Technology,
ProPhotonix

Tel: +353(0) 21 5001313

sales@prophotonix.com

About ProPhotonix

ProPhotonix Limited is a high-technology designer and manufacturer of diode-based laser modules and LED systems for industry-leading OEMs and medical equipment companies. In addition, the Company distributes premium diodes for Ushio, Osram, QSI, Panasonic, and Sony. The Company serves a wide range of markets including the machine vision, industrial inspection, security, and medical markets. ProPhotonix has offices and subsidiaries in the U.S., Ireland, U.K., and Europe. For more information about ProPhotonix and its innovative products, visit the Company's website at www.prophotonix.com.