

## EXERGEN'S NON CONTACT INFRARED TEMPERATURE SENSORS HELP ENSURE ACCURATE RESULTS IN HORTICULTURAL RESEARCH

**Plant Lighting B.V. Employs Exergen's Micro IRt/c Sensors in Research Aimed at  
Reducing Energy and Costs to Cultivate Orchids in Greenhouses**

**WATERTOWN, Mass., and ZIJTAART, the Netherlands, July 25, 2016** - Exergen Global today announced that its micro IRt/c temperature sensors are being employed by Netherlands-based Plant Lighting B.V. in its research aimed at reducing the artificial energy required to cultivate Phalaenopsis orchids in greenhouses. Orchid production, a \$600 million industry in the Netherlands, requires a significant amount of energy for artificial light, heating and cooling. Through its research, Plant Lighting hopes to find new ways to reduce energy needs while increasing plant output.

Plant Lighting had previously used thermocouples in its research, but reported that the leaves' diurnal ('daily') movements prevented the sensors from maintaining the constant contact required for accurate leaf temperature measurement. Moreover, the many small pores ('stomata') used by leaves for transpiration and CO<sub>2</sub> uptake, may differ in opening from one position on the leaf to the other. These differences can cause small local variations in leaf temperature, and therefore can require many thermocouples to accurately measure the leaves' surface. Exergen's non-contact micro IRt/c proved to be better suited for the research because they are able to measure a larger area of the leaf and provide the accuracy and reliability required for the research.

"To properly conduct large-scale experiments from start to finish in several high quality experimental greenhouses or climate chambers can require an investment of \$100,000 or more," said Dr. Ir. S.W. Hogewoning, director, of Plant Lighting. "The highly accurate temperature measurement provided by Exergen's sensors ensure that data from the experiments is precise and reliable. When we are confident our measurements are done properly, it eliminates the needs to repeat portions of the experiment, which would be very expensive indeed."

"The use of Exergen's sensors for horticultural research underscores the diversity of applications for non-contact IR sensors," said Bram Stelt, director large accounts of Exergen Global. "Exergen's highly accurate and reliable micro sensors can help increase production and save money for a wide range of industries, including printing, medical, semiconductor manufacturing, automotive and many, many more."

### **About Plant Lighting B.V.**

Planting Lighting, B.V. provides innovations in protected crop cultivation by translating scientific knowledge into practical uses. It provides research and consultancy on crop yield optimization, photosynthesis, plant responses to light, light sources (e.g. LED), and phenotyping methods. The company is based in Bunnik, the Netherlands.

### **About Exergen Corporation and Exergen Global**

Exergen Corporation, the global leader in industrial and medical non-invasive temperature technology, provides non-invasive temperature measurement devices providing lower cost, higher accuracy, less invasiveness, and greater reliability than ever previously possible. Exergen is well known for its award-

winning temporal artery thermometer in the healthcare and consumer market. The company was founded by Harvard-research scientist Dr. Francesco Pompei who holds over 70 patents. Exergen Corporation is based in Watertown, Massachusetts, U.S. Exergen Global is the worldwide solutions provider of Exergen Corporation's industrial non-contact infrared temperature sensor solutions and the recipient of the 2015 Global Frost & Sullivan Entrepreneurial Company of the Year Award (<http://bit.ly/2pYfsy4>).

For more information, visit:

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