

# Controlled-Environment Greenhouse



Agriculture, Fisheries and Conservation Department

Future Development of Controlled-Environment Greenhouses

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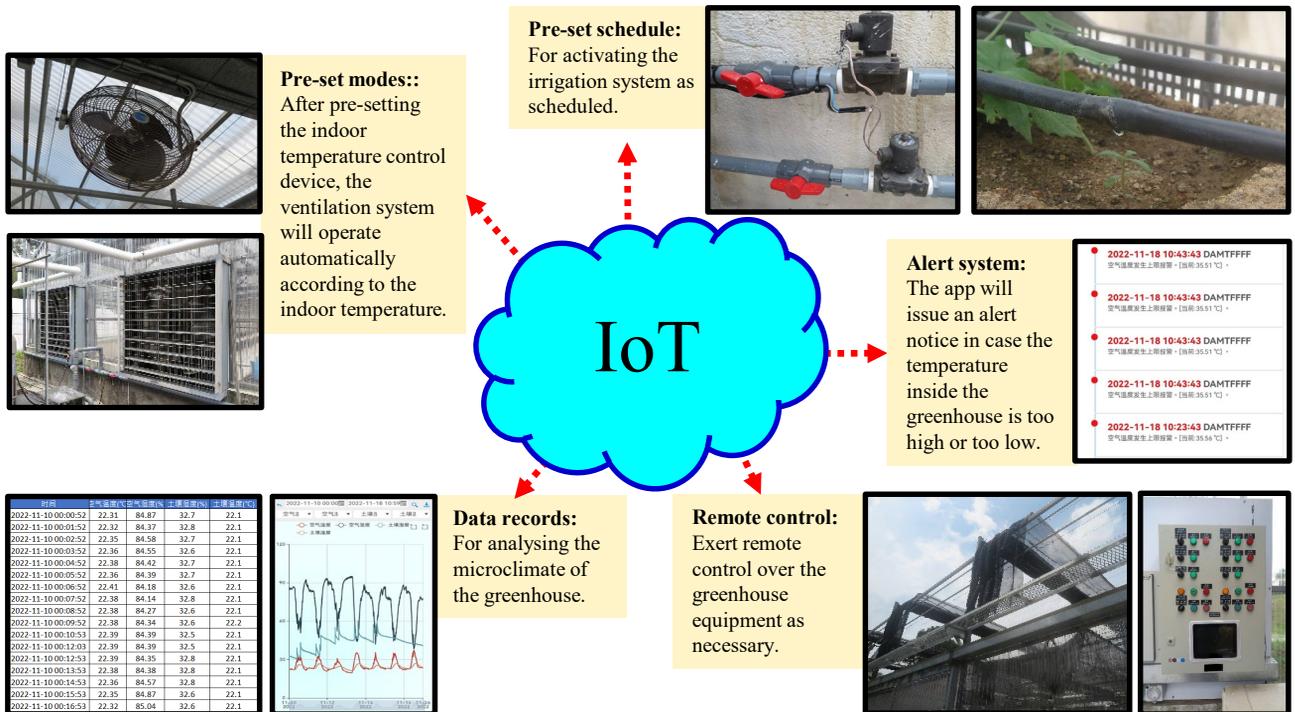
## From the Editor

With the increasingly popular application of Internet of Things (IoT), the smart greenhouse technology keeps evolving. One of the examples is the use of sensors to control the equipment in a greenhouse, resulting in enhanced effectiveness of greenhouse operation. The application of the IoT is bound to play an essential role in the future development of Controlled-Environment (CE) greenhouses.



## Application of IoT

By applying the technology of the IoT, a farmer can monitor the microclimate of the greenhouse through a mobile app, remotely control the equipment in the greenhouse, and even pre-set various modes so as to adjust and control the equipment according to the actual circumstances of the greenhouse.



## Practical application of IoT

### CE greenhouses:

The IoT is applied to control equipment such as exhaust fans, shading nets, air conditioners, humidifiers, cooling system, fill lights and circulation fans in CE greenhouses growing orchids. Successful cultivation of quality flowers will be conducive to the opening up of new markets and sharpening the competitive edge of farmers.



### Outdoor fields:

The IoT is also applied to the automated irrigation systems in the outdoor. Powered by solar energy, the system allows farmers to carry out irrigation as appropriate in the light of the weather conditions through an IoT app.



**You are welcome to browse the Facebook and Instagram pages of the Agriculture, Fisheries and Conservation Department (AFCD) for further information.**

The AFCD Home Page: <https://www.afcd.gov.hk>

For more information and booking for visit to demonstration greenhouse, please contact the Horticulture Section of the AFCD (Tel: 2679 4294)