Ladybird IoT™

Monitor | Predict | Track | Automate

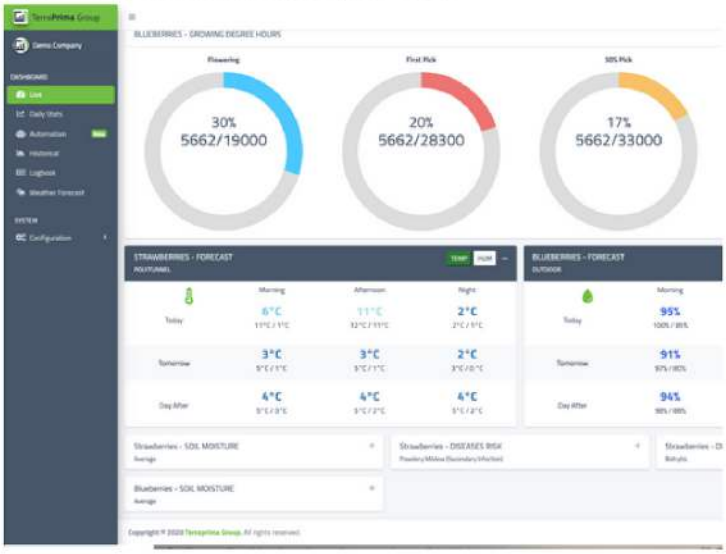
Simple and effective

Extreme weather, tight margins, and increasingly complex integrated crop management mean it has never been more important to know what conditions your crops are experiencing.

The ladybird monitors 10 important climate and soil variables and alerts you when you need to act

With battery life up to 3 years, one button setup and reliable LoRa connectivity you can trust the Ladybird to keep you informed without headaches.

Experience peace of mind, safe in the knowledge that you have the information you need.



Advanced Technology

Get a customised forecast for your polytunnel or field, powered by cutting edge machine learning.

Deliver the right amount of water for the growth stage of the crop to improve yield and quality

Disease risk forecasts allow you to protect the crop when it needs it most

Automate your irrigation based on soil moisture or climate variables

Proven Results

With 8 year's of development the powerful capabilities of the Ladybird have delivered quantifiable results.

In trials with Berry Gardens and the world famous Kew Gardens, the Ladybird demonstrated a 21% yield margin through better decisions based on climate data

Our experience with Soft Fruit, Grapes, Olives, Cherries, Eucalyptus and more mean you can trust us to monitor your crop and deliver the information you need to make the right decisions.

Contact us: sales@ladybirdiot.com

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Soft Fruit

Increasingly frequent extreme weather means it's crucial to know the actual crop conditions inside your tunnels. Act early to protect the crop with 24/7 monitoring and SMS alerts that give you peace of mind when you can't be there.

Our powdery mildew and botrytis pressure forecasting means you can minimise the risk to the crop while ensuring you only use crop protection when necessary.

Our Multi-Spectral light sensor (PAR) allows you to monitor the effect of tunnels or nets on the light availability to the crop

Substrate moisture monitoring means you can track your irrigation schedule and maximise the benefit of every drop.

Vines & Top Fruit

Accurately monitor spring frost risk and protect the crop when needed with a forecast model for your specific location, rather than relying forecasts derived from a weather station miles away.

With fewer treatment options available every year, monitor disease pressure early to give your crop the best chance.

On irrigated crops, monitor soil moisture at multiple depths through the root zone to and manage moisture availability for best quality.

Use Growing Degree Hours calculators to forecast harvest date for efficient organisation of harvest labour.

Roots & Arable

Growing potatoes often means using fields which are spread over a wide area - have confidence that conditions are right before you travel long distances to spray or fertilise the crop.

Ensure your irrigation regime is providing the correct amount of water for the crop at its current growth stage, by monitoring moisture content through the soil profile.

Track late blight pressure in potatoes with our easy monitoring of temperature and relative humidity.

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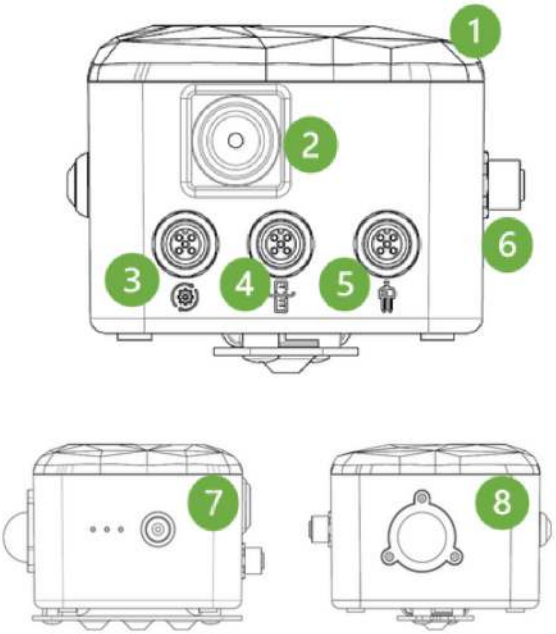

Air Temperature	Range -40°C to 125°C; Typical Accuracy at 0°C to 90°C, ±0.3°C
Air Relative Humidity	Range 0-100% RH; ±3% RH Typical Accuracy
Light (PPFD/PAR)	11-Channel spectrometer measuring illuminance and radiation
Connectivity	LoraWAN; Up to 10km range (line of sight)
Operating Temperatures	-25°C/+60°C
Dimensions/ Weight	L145mm x W135mm x H91mm; Weight 650g
Installation Options	Wall or Pole Mounting

1. **Rugged waterproof & UV resistant design**
2. **Temperature & Humidity Sensor**
3. **Automation Control**
4. **Water Level Sensor**
5. **Soil Moisture & Temperature Sensor**

Thank you.

6. **Programmable Port**
7. **Power button & connection indicator LED's**
8. **Spectrometer (11 spectral bands)**

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Additional Sensor Options

Soil Probe; Delta-T SM150T

Soil Moisture accuracy: ±3%
Soil Temperature accuracy: ±0.5°C between 0-40°C
Low salinity sensitivity
Minimal soil disturbance
Rugged, weatherproof, can be buried
Waterproof connection to IP68

Water level sensor

Measurement Media: Non-Corrosive Water
Operating Temperature: -20°C - +80°C
Measurement Accuracy: ±0.5% Full Scale
Wind Direction Accuracy: ±3%
Housing Material: Stainless Steel
Cable Length: 3m or 6m

Wind Speed & Direction

Wind Speed Range: 0.3m/s - 45m/s (0.7 - 100mph)
Operating Temperature: -30°C - +70°C, 0-100%RH
Wind Speed Accuracy: ±3%
Wind Direction Accuracy: ±3%
Housing Material: Aluminium
Water Resistance: IP65

Leaf Wetness & Temperature sensor

Leaf Temperature Range: -30°C - +70°C
Leaf Wetness Range: 0-100%
Operating Temperature: -30°C - +70°C, 0% -100%RH
Housing Material: ABS
Water Resistance: IP68

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