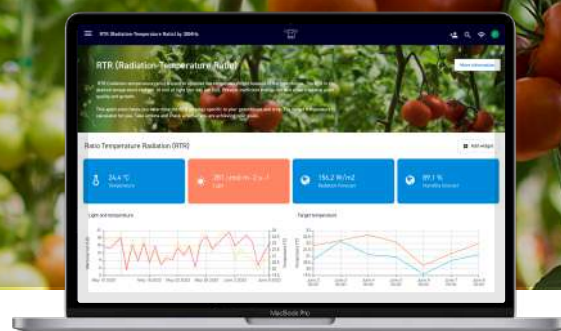




# Radiation-Temperature Ratio Strategy

Improve energy consumption and growth



The RTR (Radiation-Temperature Ratio) is used to optimize the temperature and light balance in the greenhouse. The RTR shows the desired target temperature at a certain incidence of light. The target temperature can be calculated based on the measured incidence of light (PAR) and your RTR strategy. This prevents inefficient energy use. In addition, this ensures improved growth and yield.

## What does the app do?

With the app you can determine the RTR strategy for your greenhouse and crop. In addition, the app helps to see whether you actually achieve the chosen strategy. To this end, the realized temperature can be compared with the target temperature. The target temperature is automatically calculated based on the PAR measurement and the chosen RTR strategy. You will receive notifications if adjustments are needed.

## The benefits of optimal RTR

### RTR strategy

- ✓ Prevent inefficient energy consumption
- ✓ Improve the plant balance, for a higher yield
- ✓ Better absorption of nutrients

### Crop health

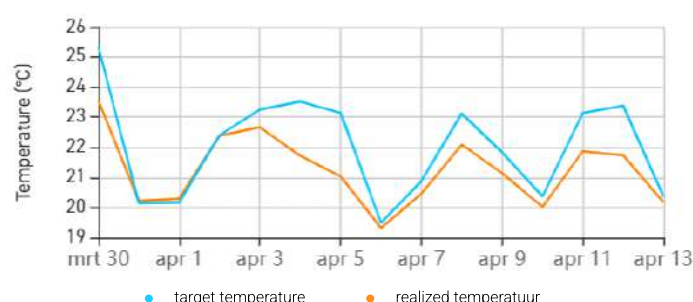
- ✓ Less stress for plants
- ✓ Better crop health
- ✓ More constant conditions

## Why the RTR app?

With the RTR app you can easily get started to optimize the temperature and light balance in your greenhouse. The application has 3 parts for this:

- Design your own RTR strategy, or choose an existing strategy to follow
- We automatically calculate the RTR target temperature based on the light irradiation. Check whether you actually achieve this in practice
- Get relevant alerts to ensure you stay in line with your strategy

You can achieve the RTR strategy by adjusting the temperature, lighting or screening. With the application you can easily check this and prevent unnecessary energy loss. In addition, the plant is better balanced, which ensures a stronger crop, better growth and more yield.



Example of a graph comparing the RTR target temperature and the actual temperature

The most important values in the app are the light irradiance (PAR) and the measured temperature. In addition, the target temperature is automatically calculated based on the light irradiation and your RTR strategy.

## What is the RTR Strategy Kit?

The RTR Strategy App is part of the total product: the RTR Strategy Kit. In addition to the app, this total solution consists of a PAR (irradiation) and a temperature humidity sensor. The sensors are compact, robust and wireless, so they can be moved easily.

In addition, a gateway is needed to set up a wireless network, so that the sensors can send data. The sensors are easy to install and the 30MHz Support desk is ready to answer questions.

*"The optimal balance between light and temperature at plant level is really important for optimal growth. The new RTR strategy app helps us with finding this optimal balance"*

**Gerben van Vugt, cultivation specialist at Anthura**

Many leading companies are already customers of 30MHz, because they appreciate the compact, wireless sensors in combination with the clear, user-friendly dashboard. 30MHz offers a solution for growers who want to get started with data-driven cultivation in an accessible manner. If you decide to use 30MHz, you don't have to change everything all at once.



**RTR Strategy Kit**  
Improve energy use and growth

### What does the kit consists of?



#### RTR Strategy App

Determine the RTR strategy for your greenhouse and crop. The target temperature is calculated for you, take actions to optimize plant growth



#### PAR sensor

Measure the light available to plants. This calculates the RTR target temperature



#### Temperature humidity sensor

Measure temperature and humidity. The temperature is used to see how well you hit the strategy



#### 1 Gateway

For connectivity with the wireless sensors



#### Repeater (optional)

Boost the signal of your wireless sensors for range 100 to 150 m extra range per repeater.

