

GROWTH CHAMBER REACH-IN FS-RI 1600



- High homogeneity and precision of set parameters
- Unique system of light & temperature control
- Natural light simulation via experimental protocols (sunrise, sunset, clouds etc.)
- Online computer control & easy programming
- Highest standards in terms of used materials, energy efficiency and performance for scientific purposes

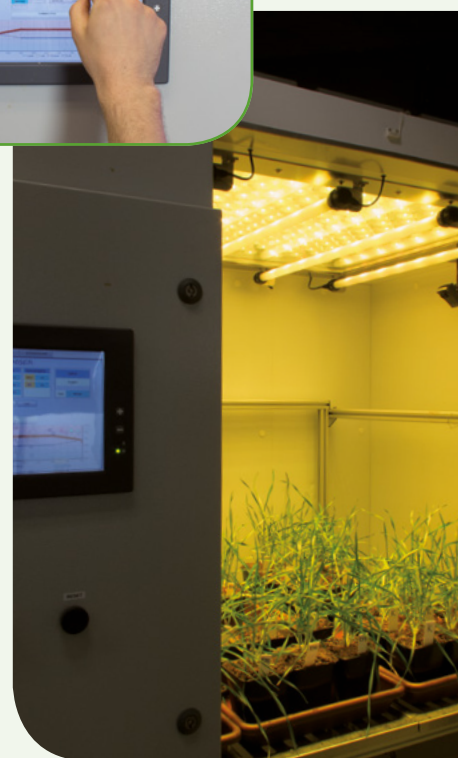
Key Features

- Standard temperature range from +5 °C to +40 °C with ensured full light exposure!
- Relative humidity from 40% to 90%
- Homogeneous illumination over the whole cultivation area
- Prevention of water condensation
- No „wind“ effect – uniform air distribution
- Capacity: 900 L
- Gas mixing for CO₂ regulation and exchange
- Gas-tight rooms
- Same conditions for small and large plants



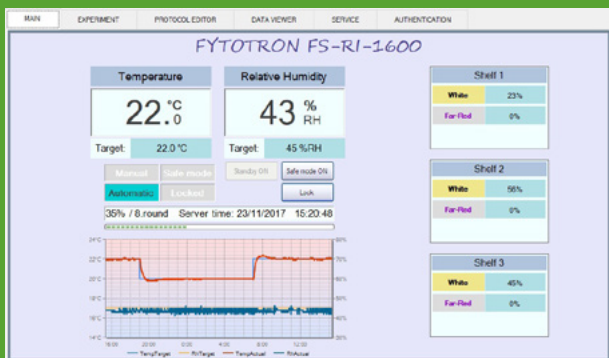
Precise Control of Irradiance

- Cool, warm or neutral white LEDs with added deep-red
- and/or far-red LEDs for optimal plant growth
- Maximum light intensity and minimal temperatures
- (25–30% more efficient in comparison with competitors)
- Collimated LED light beam for uniform illumination
- Light intensity up to 2,000 $\mu\text{mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$
- Adjustable irradiance from 0 to 100%
- LED lights 4–5 times longer lifetime than fluorescent tubes



Control & Setting

- Convenient, user friendly GUI
- 10.5" LCD color touch screen
- Over 100 user defined protocols
- Program changes in gradual steps
- Real time data visualization
- Warning messages via SMS or email



Construction Adjustments

- Easily adjustable shelves
- One large or 2-3 smaller cultivation areas
- Large inner space: 98 x 67 x 130 cm (D x W x H)
- Equipped with wheels for easy manipulation
- Optional connection and communication with other PSI
- devices (e.g. chlorophyll fluorescence measurement)

Suitable Applications

- Small scale experiments In vitro/soil cultivation
- Phenotypical analysis
- High humidity cultivation (Oryza)
- Vernalization (Brassica, Hordeum)
- Large plants (Zea, Solanum) & trees cultivation

