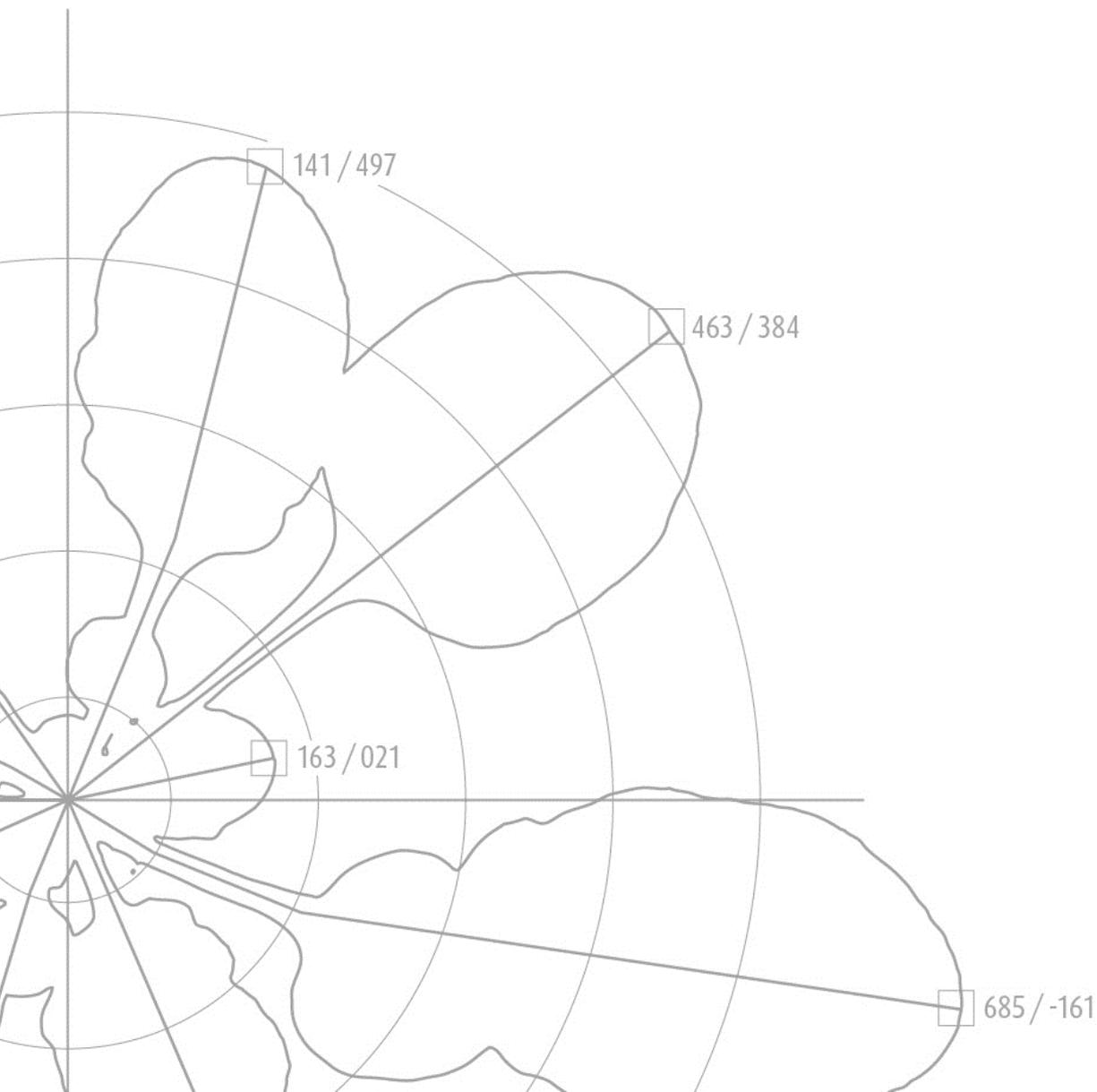


# PhenoCenter™

**Multi-Sensor Laboratory Phenotyping System**



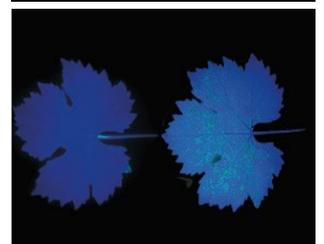
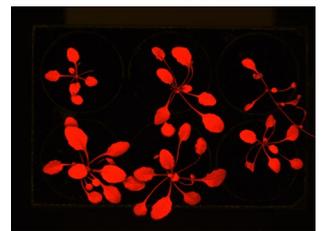
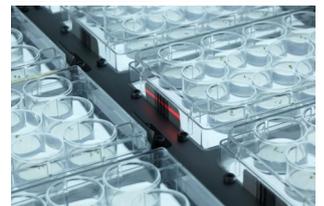
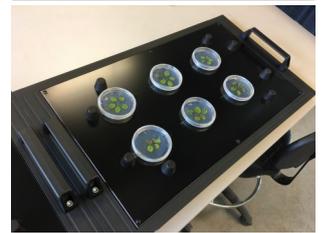
# PhenoCenter™

The most flexible multi-sensor laboratory phenotyping system for Arabidopsis, seedlings, petri dishes, MTPs, and many more sample types

- Rapid digital analysis of phenotypic traits
- Large set of sensor options
- Advanced analytical software and machine learning
- Standardized and repeatable data acquisition
- High throughput
- Pots, trays, dishes, MTPs, beakers
- Adaptors for many sample types
- Up to 40 cm sample height with manual loading /  
Up to 20 cm with automated sample loader (TrayProvider™)

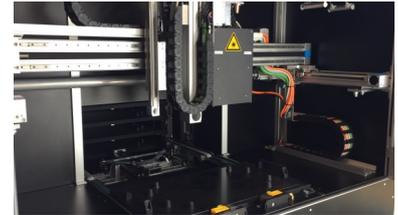
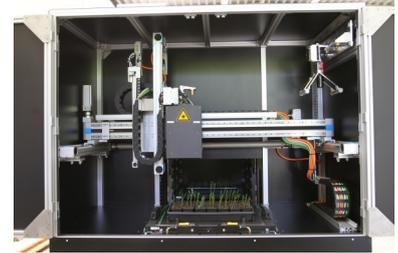
## MULTISENSOR IMAGING

- **Visible light images** provide information on sample dimensions, morphology, and color.
- An **IMAGING-PAM camera** delivers dynamic chlorophyll fluorescence parameters.
- **Hyperspectral imaging** delivers a range of wavelength data for calculation of known and user-defined vegetative indices.
- **Near-infrared (NIR)** images capture the intensity of reflected NIR radiation at 1450 nm to measure water content.
- **Fluorescence images** capture the intensity of a wide range of fluorescent pigments.
- **3D laser scanning** generates point clouds for detailed architectural and morphological information.



# CONFIGURATION AND OPTIONS

- The **Base Module** supports manual input of microtiter plates, petri dishes, plants in pots or plant flats.
- **Cameras and sensors** move across the sample stage inside the base module and are positioned with high accuracy
- The **Sensor Exchange System™** stores cameras and sensors and the moving arm attaches them for running image acquisitions across the sample stage
- **Tray Adaptors** for use with trays, MTPs and other sample carriers
- **Light table** for MTPs, petri dishes etc. available
- The **TrayProvider™**, an automatic tray loading module enables high throughput sample handling for efficient pipeline screening.
- The PhenoCenter™ can be integrated into **Climate Chambers**



## FEATURES

- ◇ Experiment-driven design
- ◇ High-resolution phenotyping
- ◇ Comprehensive machine-learning based analytical software
- ◇ All major phenotyping cameras and sensors available
- ◇ Configurable multi-sensor imaging
- ◇ Automatic sample loading available
- ◇ Integrable into climate chambers

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