

05 / Incubated Shakers

AlgaeTron AG 130-ECO 82

AlgaeTron AG 130 is a floor standing incubated shaker that provides well-defined conditions for growing algae and cyanobacteria. It comes with a shaker and is equipped with a large, easy-to-read display screen. Intuitive programming allows multiple parameter changes to timing, light intensity, light characteristics, temperature, and shaking power.



AlgaeTron AG 230 84

AlgaeTron AG 230 is a floor standing incubated shaker with minimum footprint size—yet with three independently illuminated spaces for comfortable growing of algae and cyanobacteria in controlled conditions. Programmable parameters are: timing, light intensity, light characteristics, temperature, and shaking power.



REFERENCES

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AlgaeTron AG 130-ECO

AlgaeTron AG 130-ECO is a floor standing incubated shaker that provides well-defined conditions for growing algae and cyanobacteria in Petri dishes or Erlenmeyer flasks. AG 130-ECO is equipped with a programmable controller that enables customers to create programs and to automate changes to multiple operating parameters such as timing, light intensity, light characteristics, temperature, and shaking power. User-defined operating parameters and actual values are online shown on large easy-to-read display screen. With its compact dimensions and small footprint, the AlgaeTron AG 130-ECO saves precious laboratory space and is perfect for small-scale applications. It has one illuminated space with an additional bottom shelf and accommodates up to 14 × 50 ml flasks.

Optionally, AlgaeTron may be supplemented with a Gas Mixing System GMS 150 that can bring pure or mixed gases into the incubator.

▼ APPLICATIONS

- Specifically designed for cultivation of algae, cyanobacteria and plant tissue cultures
- Accurate, precision-controlled culture growth under defined light composition
- Small footprint area for maximizing floor space in the lab
- Accurately controlled growth of algae or cyanobacteria in Petri dishes or Erlenmeyer flasks.
- Adequate space for cultivations under controlled temperature and light characteristics, intensity and mode
- Multi-line schedule for temperature and lightning

▼ KEY FEATURES

- Intuitive programming of temperature, photosynthetic light, and shaking speed
- Lighting: adjustable in intensity (from 0 to 100 %), timing, modulation, and diurnal cycling
- Timing steps from seconds to hours
- User-defined modulation
- Standard cold white + far-red LED light (customized light color is optional)
- PPFD 1,000 $\mu\text{mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$ in standard model
- Temperature control in the range of +7 to +45 °C (lights off), +15 to +55 °C (max lights on)
- LED technology with minimum undesired heating
- Shaking speed range up to 500 RPM (optional)
- Integrated gas mixing system (optional)
- Incorporated module for measuring chlorophyll fluorescence parameters (optional)



▼ TECHNICAL SPECIFICATION

- **LED Light Illumination:** LED panel 25 × 35 cm
- **Controlled Temperature Range:**
 - +15 to +50 °C (with maximum illumination)
 - +7 to +50 °C (without illumination)
 - +7 to +50 °C (with maximum illumination) – optional
- **External Dimensions (H × W × D):** 100 × 55 × 62 cm
- **Internal Dimensions (H × W × D):** 69 × 42 × 40 cm
- **Weight:** 55 kg
- **Internal Volume:** 124 l
- **Air Ventilation:** 250 l/hour
- **Compressor:** 220–240 V; ~ 50 Hz; 160 W ; 0,70 A (110V; 60Hz)
- **Power:** 300 W
- **Power Input:** 500 W

▼ CONTROL SOFTWARE (OPTIONAL)

- Data collection in real time
- Data upload for processing during the experiment
- Data visualization in graphs or tables
- Web interface



AlgaeTron AG 230

AlgaeTron AG 230 is a floor standing incubated shaker that provides well-defined uniform environment for controlled growing of algae, cyanobacteria and plant tissue cultures in Petri dishes or Erlenmeyer flasks. It is equipped with three independently illuminated shelves maximizing tissue culture area. Illumination of each shelf is separately controllable in intensity, mode and timing according to user's defined protocol. AG 230 is designed with minimal footprint size that makes it ideal for laboratories with limited space. AlgaeTron AG 230 may be supplied with up to three integrated orbital shakers, each with loading capacity of 3.5 kg and rotation speed range of 30 to 500 RPM.

AG 230 is equipped with a programmable controller that enables customers to create programs and to automate changes to multiple operating parameters such as timing, light intensity, light characteristics, temperature, and shaking power. Easy-to-read display screen located on the AlgaeTron front side clearly shows operating parameters and actual values.

Optionally, the AlgaeTron may be supplemented with a Gas Mixing System GMS 150 that can bring pure or mixed gases into the incubator.

APPLICATIONS

- Specifically designed for cultivation of algae, cyanobacteria and plant tissue cultures
- Accurately controlled growth of algae or cyanobacteria in Petri dishes or Erlenmeyer flasks
- Small footprint area for maximizing floor space in the lab
- In total 0.46 m² of culture cultivation area on 3 slide-out shelves
- Adequate space for cultivations under controlled temperature and light characteristics, intensity and mode
- Multi-line schedule for temperature and lightning

KEY FEATURES

- Intuitive programming of temperature, photosynthetic light, and shaking speed
- Three independently illuminated cultivation spaces with separate control option
- Lighting: adjustable in intensity (from 0 to 100 %), timing, modulation, and diurnal cycling
- Timing steps from seconds to hours
- User-defined modulation
- Standard cold or warm white + far-red LED light (customized light color is optional)
- PPFD up to 500 $\mu\text{mol.m}^{-2}.\text{s}^{-1}$ for top panel and up to 100 $\mu\text{mol.m}^{-2}.\text{s}^{-1}$ for two lower panels
- Temperature control in the range of +5 to +45 °C (with maximum illumination)
- LED technology with minimum undesired heating
- Shaking speed range up to 500 RPM (optional)
- Integrated Gas Mixing System (optional)

▼ CONTROL SOFTWARE (OPTIONAL)

- Data collection in real time
- Data upload for processing during the experiment
- Data visualization in graphs or tables
- Web interface

▼ TECHNICAL SPECIFICATION

- **Controlled Temperature Range:**
+15 to +45 °C – standard (shaking ON, illumination ON); +10 to +50 °C – optional (shaking ON, illumination ON)
- **LED Light Illumination:**
 - Upper LED light panel: 25 × 35 cm
 - Lower two LED light panels: 33 × 46 cm
- **External Dimensions:**
170 × 60 × 62 cm (H × W × D)
- **Internal Volume:** 265 l
- **Weight:** 70 kg
- **Refrigerant:** R600a
- **Compressor:**
220–240 V; ~ 50 Hz; 200 W ; 1A
(optionally 110 V; ~ 50/60 Hz)
- **Shaker Speed:** 30–500 RPM
- **Shaker Weight:** 9 kg
- **Shaker Loading Weight:** Up to 3.5 kg
- **Shaker Dimension:** 39 × 32 × 9 cm (W × D × H)
- **Shaker Power Supply:**
115/230 V ±10 %; ~ 50/60 Hz
- **Power Input:** 600 W / 900 W



▼ REFERENCES

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