

20190

LASA AGRO 1900 Mobile

Information

The ideal set for mobile applications

Mobility and flexibility are very important factors with regard to successful operations – fast and appropriate actions are prerequisites for the best possible yields. In the field of plant nutrition, these actions can only be taken on the basis of reliable and fast analysis results.

The mobile system LASA AGRO 1900 provides the possibility of fast and precise on-spot-determinations. The complete equipment is packed in two rugged cases.

With over 220 pre-programmed HACH LANGE and HACH methods in a waterproof, shock tested design this spectrophotometer delivers lab quality results in a portable, field ready instrument. The photometer scores in all applications in the field, wherever and whenever it shall be used. Even in dusty and wet environments where other devices cannot be used, you can easily perform your analyses with the LASA AGRO 1900.

The instrument has a large, user-friendly display and provides a simple menu navigation for easy analyses procedures even under harshest conditions. The light source of the photometer is a Xenon Flash which is only switched on for measurements because of power saving reasons.

The LASA AGRO 1900 evaluates all LCK cuvette tests. The measuring results can be carried out in

- mg / 100 g soil
- mg / liter substrate
- mg / liter solution

In contrast to the LASA AGRO 3900 the test cuvette is not recognized via the barcode but the desired parameter must be selected from a list. The prepared test cuvette is inserted and the measurement is started by pressing a button. The LASA AGRO 1900 stores up to 500 readings that are read out via a integrated plug-in mini USB interface.

The readings can easily be transferred into any table formate, e.g. in MS Excel.

The supplied plug-in is also the AC adapter and battery charger of the photometer.

Together with the [extraction case](#), this is the optimal equipment for mobile applications. The mobile system LASA AGRO 1900 is an advantageous solution for

- Horticultural plant producers with different production locations
- Peat, substrate producers with different production locations
- Advisory associations with different locations
- Consultants and service partners in horticulture and agriculture

ATTENTION:

Only LASA AGRO photometers supplied by STEP Systems are specially programmed for agricultural use with direct evaluation in mg / 100 g soil, mg / l substrate and mg / l solution.

Technical Specifications

Technical data

- **Application:** soil, substrate, water and leaf analyses
- Optical system: reference beam, spectral
- Photometric accuracy: ± 0.003 Abs @ 0.0 – 0.5 Abs
- Photometric linearity: $< 0.5 \%$ (0.5 – 2.0 Abs)
- Photometric measuring range: 0 – 3 Abs (wavelength range 340 – 800 nm)
- User programmes: 50
- Wavelength accuracy: ± 2 nm (range 340 – 800nm)
- Wavelength calibration: automatic
- Wavelength range: 340 – 800 nm
- Wavelength selection: automatic
- Data storage: 500 measured values (Result, Date, Time, Sample ID, User ID acc. to GLP)
- Detector: Silicon photodiode
- Display: Graphical display 240 × 160 pixel (LCD, b/w, backlit)
- Battery life: 15 days (typical): 5 readings a day / 5 day week without backlight (backlight usage will decrease battery life)
- Battery requirements: 4 AA size batteries
- Enclosure waterproof rating: IP67
- Storage conditions: -30 – 60 °C (-30 – 140 °F), max. 80 % rH (non-condensing)
- Operating conditions: 10 – 40 °C (50 – 104 °F), max. 80 % rH (non-condensing)
- Interface: USB type Mini IP67 (with optional Module)
- Operating mode: Transmittance (%), Absorbance and Concentration
- Power supply: 4 x AA size Alkaline / 4x NiMH rechargeable Battery / Power supply*: 110 – 240 V; 50/60 Hz
(* optional Module required. May not be available in all regions)
- Pre-programmed methods: 220
- Reproducibility: ± 0.005 Abs (0 – 1 A)
- Stray light: $< 0.1 \%$ T at 340 nm with NaNO₂
- Temperature range: 0 – 50 °C (32 – 122 °F)

- User interface: English, French, German, Italian, Spanish, Portuguese, Bulgarian, Chinese, Czech, Danish, Dutch, Finnish, Greek, Hungarian, Japanese, Korean, Polish, Romanian, Russian, Slovenian, Swedish, Turkish
- Dimensions: 98 × 178 × 267 mm (basic unit)
- Weight: 1.5 kg (basic unit)

[Video HOW-TO-USE](#)

The LASA AGRO 1900-case, contains the basic equipment of the system:

- photometer LASA AGRO 1900
- two variable easy-to-use piston pipettes with pipette tips
- cuvette holder
- one package test cuvettes of the macroelements nitrate, ammonium, phosphate, potassium and magnesium
- multi-parameter standard solution Addista LCA 703
- transport case
- rechargeable NiMH batteries (4x)

Necessary accessories:

[cuvette tests.](#)

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