LAURA®
SMART

LAURA Smart
The Smart Set in Urine analysis

PLIVA-Lachema Diagnostika
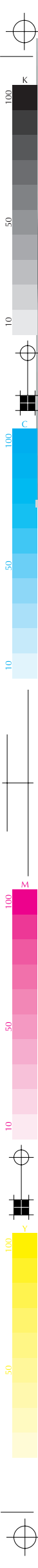
LAURA Smart is an effective and powerful solution for the analysis of urine, which is designed for laboratories, ambulances of general practitioners, family doctors and specialists. Evaluation of the urine with LAURA Smart reader helps to eliminate any subjective interpretation of the colour reaction of the diagnostic pads and therefore remarkably contributes to the correct diagnostic of the patient.

Control and calibration - LAURA Smart is calibrated automatically after every switch on. The optical part may be calibrated additionally by request, the calibration process is controlled by special software mode with using the grey control strips.

Parameters, which can be determined with the diagnostics strips PHAN® LAURA on the LAURA Smart: protein, glucose, ketones, bilirubin, urobilinogen, nitrites, leukocytes, blood, pH, specific gravity

LAURA Smart - advantages

- Two possibilities of incubation
  - Inside of the reader the capacity of the measurement 60 strips/hour
  - Outside of the reader the capacity of the measurement till to 240 strips/hour

* Special function **Smart Timing®**

The goal of Smart Timing® function is to support the user in the case of strips´ incubation outside of the LAURA Smart reader. There are 4 independent colour timers (progress bar) displayed on the screen of the reader. The user may use any of the four displayed timers which correspond withposition one of the incubated strips as follow. The user can deep a new strip if the respective timer on the screen is green, after dipping the user places the strip in the corresponding position and starts the timer (by pressing the respective green bar on the screen). The timing starts, the progress bar turns to yellow, after 45 sec the progress bar turns to red and beeps. Then the user has to place the strip onto the reader strip holder and the reader measures the strip at 60sec
The SW enables (turns to green) a new timer in every 15 sec; so 4 strips could be measured in 1 minute (240/hour)

- The LAURA Smart automatically recognise which type of PHAN® LAURA strip is measured
- Double possibilities of power
  - Portable mode batteries supply (6x1.5 V AA)
  - Stationary mode (electric power)
- Touch screen
- Possibility of connection to the PC or to the laboratory information system (LIS)
- Possibility of connection of the bar code reader (BCR) or of the external keyboard
- The wide choice software menu with a number of settings possibilities according to the user needs
- The user has possibility to choose from different ways of entering the patients' samples
- The user has possibility to choose measuring units of every analysed parameter
- The user has possibility to add a short text comment to the each measured result
- The reader has the user friendly operation menu
- The results may be printed on a built-in thermo printer with speed 2 s/parameter
- The reader is equipped with standard RS232 and USB connectors

Combination of parameters on the diagnostic strips **PHAN® LAURA** intended for **LAURA Smart:**

	Leucocytes	Nitrite	pH	Protein	Glucose	Urobilinogen	Bilirubin	Ketones	Blood	Specific gravity	Compensation field
DiaPHAN® LAURA					●			●			
PentaPHAN® LAURA			●	●	●			●	●		●
HeptaPHAN® LAURA			●	●	●	●	●	●	●		●
DekaPHAN® LAURA	●	●	●	●	●	●	●	●	●	●	●

TECHNICAL DATA

Description of device:
- Semi-quantitative reflectance photometer
- Measuring using LEDs and a colour detector
- Wavelengths: 470, 540, 650 nm
- Latency: 55 s
- Capacity: 60 strips per hour or 240 strips per hour with using the Smart Timing®
- Touch screen (LCD display): 320x240 colour TFT
- Built-in thermo printer, 2sec / parameter
- External communication to PC / LIS via RS 232 or USB port
- Possibility connect an external keyboard or a bar code reader
- Memory capacity: last 240 measurements
- Languages for end-users: EN, DE, FR, IT, RU, PL, CZ, HU, PT

PHAN® LAURA strips intended for urine analysis with LAURA Smart:
- DekaPHAN® LAURA
- HeptaPHAN® LAURA
- PentaPHAN® LAURA
- DiaPHAN® LAURA

Working conditions:
- External power source 7.5V DC switch adapter 100-240 V / 50-60 Hz
- Internal power source - battery 6x1.5V AA
- Power consumption: 20W max / 1W standby
- Temperature: optimum range 15-35 °C, relative humidity 20-80 %
- Weight: 0.8 kg without adapter, battery and paper roll
- Dimensions: 230 x 127 x 110mm