

# LAURA<sup>®</sup> SMART

## Compact Urine Strip Reader



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## Urine Analysis: Quick, Simple, Smart

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# LAURA<sup>®</sup> SMART

## Objective and compact solution for urine analysis

Urine strip reader LAURA<sup>®</sup> Smart is an efficient and compact solution for routine chemical urinalysis. Be it a clinical laboratory or the ambulance of a GP, a diabetologist, a nephrologist or other specialist, the objective photometric evaluation and semi-automated technology provided by LAURA<sup>®</sup> Smart will ease the processing of samples and contribute to correct diagnosis of the patients.

### Main features of LAURA<sup>®</sup> Smart:

- Two measuring modes: Standard (60 samples/h) and Smart Timing<sup>®</sup> (240 samples/h)
- Portable mode using batteries
- Easy operation via touchscreen
- Simple maintenance
- Strip type flexibility
- Smart sample identification: sequential, sample ID
- Automatic compensation of atypical sample color
- Built-in thermal printer
- LIS / HIS connectivity
- External keyboard and barcode reader connectivity
- Manual entry of sample color and turbidity with customizable category names
- Automatic self-check at each initialisation
- Easy and quick quality check with control strips
- Compatibility with Erba Lachema and 3<sup>rd</sup> party liquid controls

### Sample identification made easy

LAURA<sup>®</sup> Smart offers two different sample identification modes:

- Sequential:** a sequence number is automatically assigned to each sample
- Sample ID:** a unique ID number can be entered for each sample either manually or by means of external keyboard or barcode reader

### Smart Timing<sup>®</sup> mode

Smart Timing<sup>®</sup> is a special working mode of LAURA<sup>®</sup> Smart that provides an elevated throughput of 240 samples per hour. While in Standard mode 1 strip incubation is counted at a time, in Smart Timing<sup>®</sup> mode 4 incubation periods are counted in parallel enabling a four times higher throughput.

The process is aided by a smart timer function of the software and a strip scheduler tray where always 4 strips can be kept prepared according to the sequence of the timers. Every 15 seconds, one of the 4 timers changes color and gives a beep signal to indicate that a new strip should be placed for measurement.



### Control, calibration and maintenance

LAURA<sup>®</sup> Smart performs a simple and fast automatic self-check and calibration at each start-up. If a more sophisticated quality control of the optical system is required, special control strips and a special software mode are provided to perform control measurement. To verify the precision and accuracy of both the reader and the strip at the same time, quality check using liquid controls is available. URINORM is the liquid control offered by Erba Lachema for the PHAN<sup>®</sup> urine strips and the LAURA<sup>®</sup> urine strip readers, however different 3<sup>rd</sup> party liquid controls are also applicable.

Proper hygienical condition of the device can be kept with a simple and fast daily cleaning procedure.

### Strip type flexibility

To cover the full range of routine chemical urinalysis, LAURA<sup>®</sup> Smart is compatible with different types of urine test strips. The strip type being used is automatically identified by the reader, no manual setting is needed.

	Leukocytes	Nitrite	pH	Protein	Glucose	Urobilinogen	Bilirubin	Ketones	Blood	Specific gravity	Microalbumin	Creatinine	Compensation field
DekaPHAN <sup>®</sup> LAURA	•	•	•	•	•	•	•	•	•	•			•
HeptaPHAN <sup>®</sup> LAURA			•	•	•	•	•	•					•
PentaPHAN <sup>®</sup> LAURA			•	•	•			•	•				•
TetraPHAN <sup>®</sup> SG LAURA			•	•	•					•			•
DiaPHAN <sup>®</sup> LAURA					•			•					•
MicroalbuPHAN <sup>®</sup> LAURA										•	•	•	•

## TECHNICAL SPECIFICATIONS

### Description of the device:

- Semi-quantitative reflectance photometer
- Optical unit: LEDs and colour detector
- Wavelengths: 470, 540, 650 nm
- Incubation period: 55 s
- Capacity: 60 strips per hour in Standard mode or 240 strips per hour with in Smart Timing<sup>®</sup> mode
- Touchscreen: color TFT LCD display (320 x 240 pixels)
- Built-in thermo printer
- Host interface: RS232, USB
- Possibility to connect external keyboard or a barcode scanner via PS/2
- Memory capacity: last 360 results
- Languages for end-users: EN, DE, FR, IT, RU, PL, CZ, HU, PT

### Working conditions:

- Power source: Normal mode: 9 V DC switch adapter, AC 90 – 230 V / 50 – 60 Hz  
Portable mode: 6 x 1.5 V (type AA) batteries
- Power consumption: 20 W max. / 1 W standby
- Temperature: 20 – 25 °C
- Relative humidity: 20 – 80 %
- Weight: 0.8 kg without adapter, battery and paper roll
- Dimensions: 230 x 127 x 110 mm

Cat. nr.	Product	Qty
INS00064	LAURA <sup>®</sup> Smart	1 pce
URPH0028	DekaPHAN <sup>®</sup> LAURA	100 strips
URPH0027	HeptaPHAN <sup>®</sup> LAURA	100 strips
URPH0026	PentaPHAN <sup>®</sup> LAURA	100 strips
URPH0024	DiaPHAN <sup>®</sup> LAURA	100 strips
URPH0025	TetraPHAN <sup>®</sup> SG LAURA	100 strips
URPH0029	MicroalbuPHAN <sup>®</sup> LAURA	50 strips
REG00053	Urinorm	2x3 bottles
URPH1003	Control strips for LAURA <sup>®</sup> Smart	3 pcs

