Charm EZ® System

Rapid Testing for Antibiotics in Milk
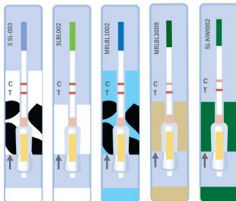
for ROSA® Lateral Flow Strip Technology

Charm EZ®

Charm EZ instantly identifies test strip color and automatically adjusts incubation time, temperature, and test calibration to match.

## Charm EZ reads a broad range of ROSA® (Rapid One Step Assay) Tests

Beta Lactam

Charm 3 SL3	Charm 3 SL3 Beta-lactam
SLBL	Safe Level Beta-lactam
MRLBL1	Maximum Residue Limits Beta-lactam, 1-minute
MRLBL3	Maximum Residue Limits Beta-lactam, 3-minutes
SL KIWI	Safe Level Beta-Lactams and Cefalonium (New Zealand)

Combo

|	
FLUSLBL	Flunixin and Beta-lactam
MRLBLTET	Maximum Residue Limits Beta-lactam and Tetracycline
MRLBLTET2	Maximum Residue Limits Beta-lactam and Tetracycline, 2-minutes
MRLBLRFTET2	Maximum Residue Limits Beta-lactam and Tetracycline, Customs Union countries (Russia, Kazakhstan, and Belarus)

Other Antibiotics
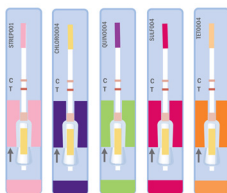
STREP	Streptomycin
CHLOR	Chloramphenicol
QUIN	Quinolones
SULFA	Sulfonamines
TET	Tetracycline

Aflatoxin
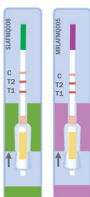
SLAFMQ	Safe Level Aflatoxin M1, Quantitative
MRLAFMQ	Maximum Residue Limits Aflatoxin M1, Quantitative

Charm EZ Features and Benefits

The EZ enables **hands-free testing** with a combined incubator and reader. Once the incubation is complete, the EZ automatically analyzes the test strip. High volume users can **batch** external tests with multiple ROSA quad incubators.

A **touch screen** interface streamlines operation.

Results are at your fingertips. The EZ's internal memory backs up 8000 test results; and the SD card stores over 100,000 test results. Transmit results to a PC using a standard USB cable or wirelessly. Transmit results to a LIMS network over Ethernet. Regardless of your transfer method, EZ results are easily exported to Excel for analysis.

Sample IDs can be input with the touch screen, an external keypad, an RFID, or a bar code reader.

Self Diagnostics | Prevents Errors

The EZ Inputs Test Conditions Automatically

The EZ enters the incubation time, temperature, and channel for the operator. The EZ determines all this from the strip color.
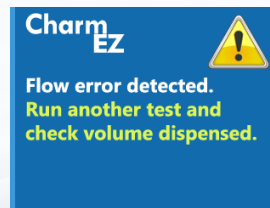
The EZ reads **"purple"** as:

- Incubation time = 8 min
- Temperature = 40 °C
- **Channel = Chloramphenicol**

The EZ Checks Sample Volume
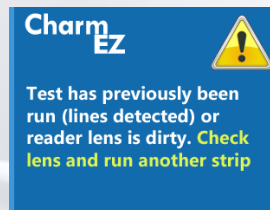
If the sample flow is incorrect (e.g., the wrong volume of milk is added), the EZ prompts the operator to start over.

Charm EZ
⚠️
Flow error detected. Run another test and check volume dispensed.

*Premeasured 300 µl pipettes can be ordered from Charm.

The EZ Checks Optics

An optics check identifies previously run strips and when the lens needs cleaning.

Charm EZ
⚠️
Test has previously been run (lines detected) or reader lens is dirty. Check lens and run another strip

*To make cleaning the lens easy, you can remove the door with a few turns of an Allen wretch.

The EZ Recognizes Invalid Tests

If the door is opened during the test, the test is invalid.

Charm EZ
⚠️
ERROR. Door was opened during assay. Remove used strip and discard.
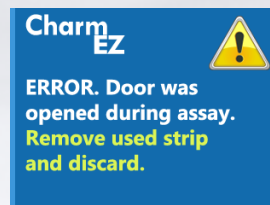
Multilingual

Any two languages can be configured on each EZ system. An operator can switch to his or her language without a special password.

Charm EZ — Insérez la bandelette avant de commencer — MENU

Charm EZ — Gazy Włóz do Start — MENU

Charm EZ — キットをセットしてスタート — メニュー

Charm EZ — Inserte la tira para empezar — MENU

Specifications

	Charm EZ®	LF-ROSA-EZ LF-ROSA-EZ-US
Optional Accessories	**Item**	**Item Number**
	12V Auto Adapter 24V---->12V Power Converter	PWR-AUTOCRD PWR-CONV-24/12
	Thermal Printer	PRN-THERMAL-SYS-LGEZ

Unit Dimensions:	17 x 16.4 x 7 cm (W x H x D)
Weight:	0.5 kg
Screen Dimensions:	5.6 x 7.3 cm (W x H)
Screen Display:	64 bit, LED backlighted color 8.9 cm display
User Interface:	Touch Screen
Power Source (AC):	12 V DC Adapters for 110 V / 60 Hz or 220 V / 50 Hz
Auto Adapters:	12 V and 24 V DC (with converter)
Calibration:	Factory Set (controls available for verification)
Memory Capacity:	100,000 Tests
Data Port:	USB and SD card slot
Data Output:	Test ID, Sample ID, Operator ID, Test Result, Temperature, Date and Time