

# TSR-100 Test Strip Reader



TSR-100 Test Strip Reader can distinguish the differences of colors from various biochemical reactions and analyze the reactants to provide quantitative clinical diagnosis. The diagnostic analysis can be applied for drugs of abuse, fertility, and disease test etc.. It can also be applied to test disease or distinguish drug residual in animals. To summarize, these readers provide a detection platform for rapid test applications.

— Further to the test proceeding, the operator places the test cassette or the test strip into the reader's cassette holder and depending on the selected reading mode, the evaluation process will be automatically initiated, the final results will be printed out by the internal printer.

— We offer an OEM business-to-business solution based on the reader for different test strip manufacturers.

— The reader is capable of reading up to 5 lines evaluating the Lateral Flow Colloidal Gold test cassettes and strips

TSR-100 and TSR-200 test strip reader are suitable for test the immuno chromatographic test strips. By using modern photoelectric technology and photo-diode to detect the intensity of the reflected light, the reader can detect the color of the strip, then calculate the quoting or concentration. It can avoid reading mistake by eyes and make rapid, high sensitivity when using reader to detect the color change of test strip.

Easy to use and high accuracy

1. 6.2 inch touch screen for TSR-100
2. Powerful program design, it is easy to be used
3. Patented design offer good solutions guaranteed and excellent results
4. Each testing result is available to check and it can show the graph of the result
5. Build-in or external thermal printer
6. Rapid instrument calibration

Customization acceptable

1. Equipped specialized software of different test strips, increase or decrease detection program according to the manufacturers requirements
2. Support customization according to user needs
3. Test card and test strip for user flexible choice
4. Desktop and portable for user choice:  
TSR-100 Desktop test strip reader  
TSR-200 Portable test strip reader

Remark for Test Strip Reader

1. Test strip reader must match the test strip, cooperate with the manufacturer of test strip
2. Support customization according to test strip manufacturer needs
3. Fluorescence detection must be provided excitation wavelength, emission wavelength and life of fluorochrome

Detection principle

Standard test strip structure as right picture, these equipment's detect sample positive or negative (concentration) by measuring reflection of light intensity of T and C line.

These are also suitable for some test strip with several T lines. The TSR-100 can test 5 T lines and the TSR-200 can test 4 lines

Used for:

— For all kinds of gold immuno chromatography reagent kits, qualitative, semi-quantitative, fully quantitative measurements for immuno chromatographic reagent kits.

Applications:

- Drugs of Abuse Tests
- Fertility Tests
- Infectious Disease and Health Tests
- Animal Disease and Drug Residual, etc.

1. 6.2-inch touch screen and smart operation system for easy use
2. High-sensitivity measurement with high repeatability
3. Supports a wide range of reagents as well as reagent development
4. Compatible with different reagent housing configurations
5. Large built-in memory can save more than 10,000 measurement records which you can check out at anytime
6. Colorimetric detection: Colloidal gold, colored latex beads, carbon etc.
7. Automatic line position detection and intensity calculation
8. Powerful Software functions for the manufacturer of rapid tests and for End-users
9. OEM service is available according to different reagent kits or fluorescence detection
10. Internet, wireless internet function extendable
11. Strict calibration system for stable results
12. Automatically identify CT line position, Error correction range  $\pm 3\text{mm}$
13. Fast and accurate test reduce human errors, automatic calculate concentration and judgment
14. Accurately identify one or more( up to 5) T lines value and CT ratio
15. Large built-in memory can save 10000 records
16. Build-in thermal printer
17. Powerful software, build-in 2 systems software (one for the end-user, another one for the reagent manufacturer)

## Technical Data

Model	TSR-100
Wavelength	525±30nm (Base the requirement of customer)
Detector Type	Photodiode
Test item	Immuno chromatographic test cards or wide 2~6mm test strips
Parameter of test item	According to the requirement of test strips
Delay-time test	Set delay-time, then, the test strip complete the reaction in the reader, timed automatic detection
Detection result	Multi-algorithm, quantitative, Selected results, save and print results
Test Speed	240 strips each hour
Repeatability	CV<2%
Stability	Drift value≤3% in 2 hours
Data analysis	Qualitative, quantitative, semi-quantitative, Multi-algorithm
Display	6.2 inch touch screen
Connections	2 x USB
Number of T-line	5 lines

Printer	Built-in Printer
Save Type	Built-in SD card (2GB)
Power Adapter	DC12V 4A
Power	20W
Dimensions (W x D x H) mm	320 x 195 x 156 mm
Weight	4kg