

TC-MATRIX800

Fully Automatic Chemistry Analyzer

- 800 Tests / Hour, Double Reagent

For over 25 years, Teco Diagnostics has been an industry leader in the manufacturing of in-vitro clinical diagnostic tests and instruments. From powder to liquid clinical chemistry, we have high quality solutions for your diagnostic needs. Based in Anaheim, CA, our manufacturing facility is FDA regulated, and thus all phases of our production processes are based on strict Current Good Manufacturing Practices (cGMP) regulations which safeguard the excellent quality of all our products.



FDA Registered and cGMP
Compliant Manufacturer
ISO 13485:2016 Certified
SA8000 Certified I CE



TC-MATRIX800

Fully Automatic Chemistry Analyzer

- Constant 800 test / hour with double reagent
- Double 90 reagent positions
- Automatic liquid level sensing, anti-collision protection.
- Multi wavelength simultaneous detection.
- New amorphous optical plastics reaction cups, perfect transmittance.
- Maintenance free water bath circulating heating system.
- Friendly surface and easy to operation



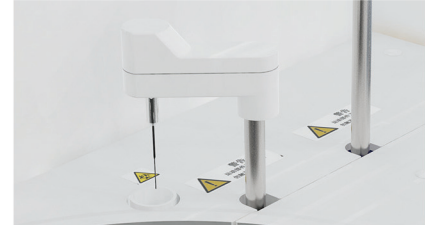
Multifunctional precision sampling probe

- 3 separate needle probes, The inner and outer of needles are automatically cleaned with acidic and alkaline cleaning solution to reduce cross contamination and ensure the accuracy of measurement data
- Dedicated sampling probe equipped with sensitive liquid sensor, timely feedback of reagent & sample residuals. Automatic adjustment of depth, intelligent collision protection, with automatic reset function



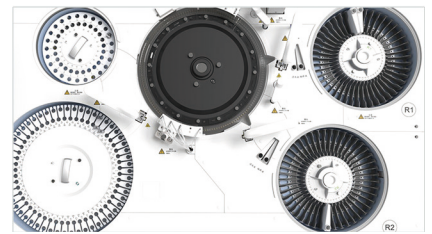
Excellent mixer design

- Two separate mixers, make the reaction liquid well mixed.
- Teflon coating mixers. No water dropping (reducing carry-over)
- Flat paddle method stirring, rotary washing
- Excellent mixing effect with standard mixing procedure



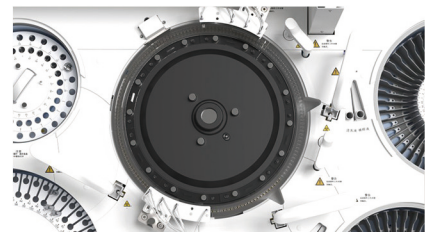
Reagent & sample tray

- 90 reagent positions
- 160 sample positions, micro cup & test tube blood collection can be used
- Non-stop cooling system, 24 hours 2°C -14°C
- Bar code reader (optional)



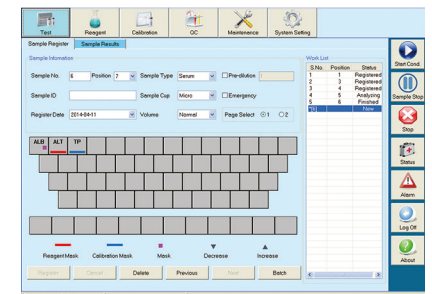
Reaction tray

- 160 reaction cuvettes
- Water circulation reagent cooling, Reaction volume as low as 150µl
- Stable & accurate temperature(37±0.1°C) for reaction
- 8-step automatic washing, clean thoroughly



Advanced operating system

- User friendly software interface simple, easy-to-operation
- Sample automatic dilution(decrease, increase, normal)
- Reaction result automatic checking and warning, calibration result automatic checking, warning alarm log
- Linear & nonlinear calibration, Multi-points calibration up to 8 points
- Quality control apply to westgard, L-T plot, cumulative



Technical specifications

General information

Machine type	Random access, open reagent & locked reagent (optional)
Test speed	Constant 800 tests/hour (Mono reagent or double reagent)
Test principle	Colorimetric method, turbidimetry
Test method	1 point end, 2 point end, Fixed-Time, Kinetics
Calibration type	Linear & nonlinear

Sample unit

Sample tray	160 sample positions
Sample tube	Micro cup & Test tube & Blood collection tube can be used. (\varnothing 12 -13)mm * (25 — 100)mm
Sample volume	2-30 μ l, step by 0.1 μ l
Sample probe	Liquid surface detection, timely tracking for liquid volume. Collision avoidance
Sample barcode	Sample barcode reader (optional)

Reagent unit

Reagent tray	90 reagent positions, Refrigerator cooling system, 24 hours 2°C-14°C, open system
Reagent volume	20-300 μ l, step by 1 μ l
Reagent needle	Liquid surface detection, timely tracking for liquid volume. Collision avoidance.
Reagent barcode	Reagent barcode reader (optional)

Reaction unit

Reaction tray	160 reaction cuvettes, new amorphous optical plastics reaction cups, perfect transmittance.
Reaction volume	150 μ l-330 μ l
Reaction time	10 minutes
Temperature	Water circulation reagent cooling

Mixing system

Mixer	paddle-type mixing, effective reducing of carry-over
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Optical system

Light source	Halogen lamp
Wavelength	340-800nm, 12 wavelengths
Absorbance range	0-4.0 Abs
Resolution	0.0001 Abs

Operation system

Operation system	Windows XP, Windows 7, Windows 8, Windows 10
Data processing	Automatic calibration, test combination, effective time management of reagents, serum index, whole process de-tection, linear expansion of enzyme, blank deduction,dirty cuvette memory, cross infection prevention, patient information memory and association input, automatic report audit, data fuzzy query, report statistics and printing, reference range grading, alarm information classification, user operation privilege classification management.

Report printing	6 formats optional, surppoort custom pattern
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Interface	TCP/IP network interface
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Working conditions

Power supply	AC 110/220V \pm 10%, 50/60 Hz, 650W
Water consumption	\leq 40L/hour(maximum)
Dimension	1360mm * 810mm * 1180mm (L*W*H)
Weight	350kg