

TC-MATRIX120

Fully Automatic Chemistry Analyzer

- 120 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-MATRIX120

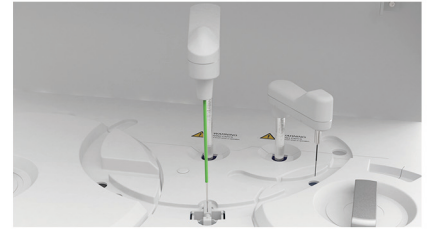
Fully Automatic Chemistry Analyzer

- Constant 120 test / hour with double reagent
- 80 reagent positions
- Automatic liquid level sensing, anti-collision protection.
- Integrated full closed optical system, multi wavelength simultaneous detection.
- New amorphous optical plastics reaction cups, perfect transmittance.
- Maintenance free semiconductor solid state refrigeration.
- Friendly surface and easy to operation



Multifunctional precision sampling probe

- External & internal mirror polish, external & internal probe washing
- Dedicated sampling probe equipped with sensitive liquid sensor, timely feedback of reagent & sample residuals.
- Collision protection, automatic probe depth adjusting



Excellent mixer design

- Teflon coating mixers. No water dropping (reducing carry-over)
- Excellent mixing effect with standard mixing procedure



High precision ceramic syringe

- Permanent ceramic piston
- Accurate dispensing as low as 0.1 µl



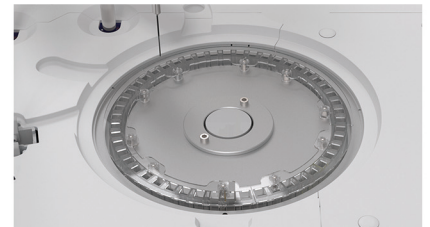
Reagent & sample tray

- 80 reagent positions (40 for R1, 40 for R2)
- 40 sample positions, micro cup & test tube can be used
- Non-stop cooling system with peltier pad inside, 24 hours 2°C -14°C
- Bar code reader (optional)



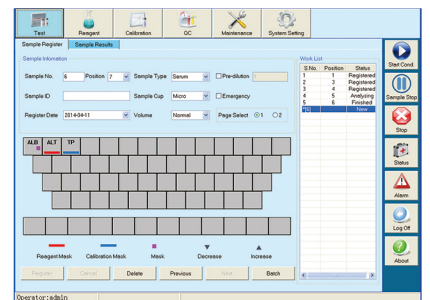
Reaction tray

- 50 disposable cuvettes
- Reaction volume as low as 150 µl
- Stable & accurate temperature(37±0.1°C) for reaction



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 120 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	40 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	80 reagent positions (40 for R1 & 40 for R2), Non-stop cooling system with peltier pad inside, 24 hours 2°C-14°C, open system, could accept any reagent
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	50 reaction cuvettes, new amorphous optical plastics reaction cups, perfect transmittance.
Reaction volume	150 μ l-330 μ l
Reaction time	10 minutes
Temperature	Peltier pad incubation system, reaction temperature (37°C \pm 0.1 °C)

Mixing system

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

Light source	Halogen lamp
Wavelength	340nm; 405nm; 450nm; 505nm; 546nm; 578nm; 630nm 700nm (4 more options)
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, support 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	6L/hour(maximum)
Dimension	750mm • 550mm • 490mm (L*W*H)
Weight	70kg