



# TC-MATRIX600

## Fully Automatic Chemistry Analyzer

- 600 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.



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# TC-MATRIX600

## Fully Automatic Chemistry Analyzer

- Constant 600 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 semiconductor solid state refrigeration.
- 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
- 120 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

- 120 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

<b>Machine type</b>	Random access, open reagent & locked reagent (optional)
<b>Test speed</b>	Constant 600 tests/hour (Mono reagent or double reagent)
<b>Test principle</b>	Colorimetric method, turbidimetry
<b>Test method</b>	1 point end, 2 point end, Fixed-Time, Kinetics
<b>Calibration type</b>	Linear & nonlinear

## Sample unit

<b>Sample tray</b>	120 sample positions
<b>Sample tube</b>	Micro cup & Test tube & Blood collection tube can be used. ( $\varnothing$ 12 -13 )mm * ( 25 — 100 )mm
<b>Sample volume</b>	2-30 $\mu$ l, step by 0.1 $\mu$ l
<b>Sample probe</b>	Liquid surface detection, timely tracking for liquid volume. Collision avoidance
<b>Sample barcode</b>	Sample barcode reader (optional)

## Reagent unit

<b>Reagent tray</b>	Double 90 reagent positions, Refrigerator cooling system, 24 hours 2°C-14°C, open system, could accept any reagent.
<b>Reagent volume</b>	20-300 $\mu$ l, step by 1 $\mu$ l
<b>Reagent needle</b>	Liquid surface detection, timely tracking for liquid volume. Collision avoidance.
<b>Reagent barcode</b>	Reagent barcode reader (optional)

## Reaction unit

<b>Reaction tray</b>	120 reaction cuvettes, new amorphous optical plastics reaction cups, perfect transmittance.
<b>Reaction volume</b>	150 $\mu$ l-330 $\mu$ l
<b>Reaction time</b>	10 minutes
<b>Temperature</b>	Water circulation reagent cooling

## Mixing system

<b>Mixer</b>	paddle-type mixing, effective reducing of carry-over
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## Optical system

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

## Operation system

<b>Operation system</b>	Windows XP, Windows 7, Windows 8, Windows 10
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<b>Data processing</b>	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.
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<b>Report printing</b>	6 formats optional, surppoort custom pattern
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<b>Interface</b>	TCP/IP network interface
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## Working conditions

<b>Power supply</b>	AC 110/220V $\pm$ 10%, 50/60 Hz, 650W
<b>Water consumption</b>	$\leq$ 40L/hour(maximum)
<b>Dimension</b>	1110mm * 810mm * 1180mm (L*W*H)
<b>Weight</b>	300kg