

# TC-MATRIX 400

Teco's TC-MATRIX400 is a biochemistry analyzer for in vitro diagnostic use in clinical laboratories and designed for in vitro quantitative determination of clinical chemistries in serum, plasma, urine or cerebrospinal fluid samples.



TECO DIAGNOSTICS



FDA Registered and cGMP  
Compliant Manufacturer  
ISO 13485:2016 Certified  
SA8000 Certified 1 CE



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.



# TC-MATRIX 400

## Technical specifications

### General information

Machine type	Random access, open reagent & locked reagent (optional)
Test speed	Constant 400 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. ( Φ 12 -13 )mm * ( 25 - 100)mm
Sample volume	2-30μl, step by 0.1μl
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	20-300μl, step by 1μl
Reagent needle	Liquid surface detection, timely tracking for liquid volume. Collision avoidance.
Reagent barcode	Reagent barcode reader (optional)

### Reaction unit

Reaction tray	The reaction tray is single circle, with a total of 44 semi-permanent plastic cuvettes
Reaction volume	150μl-330μl
Reaction time	10 minutes
Temperature	Peltier pad incubation system, reaction temperature (37°C± 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

### Operating 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 detection, 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 interface	6 formats optional, support custom pattern
interface	TCP/IP network interface

### Working conditions

Power supply	AC 110/220V ± 10%, 50/60 Hz, 1000VA
Water consumption	8 L/hour (maximum)
Dimension	788mm * 565mm * 1120mm(L*W*H)
Weight	≤136Kg