



Thermo Scientific MGC 240 Bench Top Analyzer

System Solutions for Thermo Scientific Drugs of Abuse Testing and Therapeutic Drug Management





System Solutions Drugs of Abuse Testing Therapeutic Drug Management

The MGC 240 Bench top analyzer meets the marketplace need for an open, flexible system. Its multiple wavelengths accommodate multiple technologies.

Whether it is in the pre-employment, criminal justice environment, clinical, reference or hospital laboratory, or as a dedicated stat lab instrument, this small bench top analyzer performs like the larger instruments in supporting your testing requirements.

Capable of running 240 tests per hour and handling up to 24, two-reagent immunoassays per run, this instrument can be used for your drugs of abuse screens and therapeutic drug monitoring, including your immunosuppressive diagnostics assays and specimen validity tests.

It provides a 24-hour cooling system, so reagents can be left in place on the instrument The MGC 240 uses a unique, semi-permanent, plastic cuvette system reducing the amount of time spent with on-going replacements. The unique air pressure mixing system eliminates stirring paddles and ... no more carryover.

Measurements

System	Discrete, single line random access, multi-test analysis	
Number of tests	24 items	
Throughput	240 tests/hour	
Analytical method	End point, rate assay	
Calibration curve	Linear, spline, logit-log, exponential, polynomial	

Reagent Handling

Reagent tray	24 sectors
Reagent bottle	20 mL, 40 mL, 60 mL
Reagent volume	20 - 330 µL (5µL step)
Reagent cooling temp.	5 – 15°C
Residual vol. Info.	Calculated by count down system
Reagent identification	Position ID, bar-coded ID (option)
Tray exchange	Possible with reagent bottles

User Interface

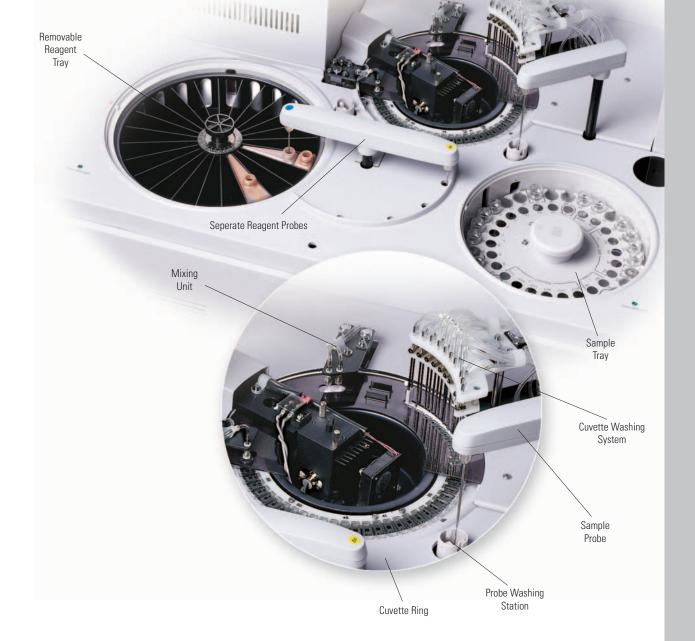
Run monitor	Operation status watching	
Reaction monitor	Reaction curve graphic display	
Quality control	Westgard multi-rule	
Auto message	Visual and audio "Sampling stop", "End of analysis" etc.	
Data storage capacity	Test results: 9999 tests	
Printer	Internal	
Power supply	Internal or external	
Ambient temperature	15-30°C	
Dimensions	31(W) x 25(D) x 21(H) inches	
Weight	Approx. 180 lbs	

Reaction

Cuvette material	Plastic	
Reaction liquid volume	200 µL min. 400 µL max.	
Reaction time	10 min. (1st reaction: 5 min., 2nd reaction: 5 min.)	
Reaction temperature	37°C ± 0.1°C	
Wavelength	12 wavelengths (340-800 nm)	
Light source	Tungsten halogen lamp (2000 hours type)	
Linear range	OD 0 – 2.5	
Cuvette washing	By automatic washing system	
Reaction waste	Reaction waste collection pump (option)	
Water supply/drain	3.5 liters/hour	

Sample Handling

Contents of test	DAU, Immunosuppressant, TDM, clinical chemistry	
Sample container	Cup, primary tube	
Sample number	40 samples, 30 with barcodes	
Sample tray number	10 max. (8 trays are supplied as option)	
Sample volume	3 - 30 µL (0. 5µL step)	
Automatic dilution	Dilution ratio: 10 ~ 100	
STAT sample measurement	Interruption permitted even during analysis	
Sample identification	Position ID, bar-code ID (option)	



Features

- Compact Bench top analyzer
- Broad menu of immunoassays with multiple technology options
- Multiple channels: up to 24 two-reagent tests
- High throughput: 240 tests/hour
- 24-hour reagent cooling
- Bar coding capabilities

Functions

- Random access, true STAT interrupt capability
- Adapts to various primary tubes and sample cups
- Automatic cuvette QC
- Auto rerun, auto dilution, sample pre-dilution
- Re-suspension mixing for latex particles
- Auto alarms for washing and waste containers
- Air pressure mixing: no carry over

Software

- Windows® based technology
- Reagent/test volume inventory display
- User-friendly intuitive operator interface
- Run-monitor displays test results wait time
- Bi-directional interface for LIS systems
- Host query communications

Cuvettes

- Unique design
- Easy maintenance
- Distinctive air pressure mixing system: no mixing paddles
- No carry over: fewer washing steps
- Semi-permanent: replace 1-2 times per year





Drugs of Abuse		
Amphetamine	Methadone	
Amphetamine/Ecstasy	Methadone Metabolite (EDDP)	
Barbiturate	Methaqualone	
Benzodiazepine	Opiate	
Buprenorphine	Opiate 2K	
Cocaine	Oxycodone	
Ecstasy	Phencyclidine (PCP)	
Ethyl Alcohol	Propoxyphene (PPx)	
ETG	THC (Cannabinoid)	
Heroin Metabolite (6-Acetylmorphine)		

Specimen Validity Tests	Serum Toxicology
Chromate-Detect	Barbiturate
Creatinine- Detect	Benzodiazepine
General Oxidant-Detect	Tricyclics (pending)
Gravity- Detect	
Nitrite- Detect	
pH-Detect	

Therapeutic Drug Monitoring		
Amikacin	Procainamide	
Carbamazepine	Quinidine	
DRI Digoxin	Theophylline	
Gentamicin	Tobramycin	
Lamotrigine	Topiramate	
NAPA	Valproic Acid	
Phenobarbital	Vancomycin	
Phenytoin	Zonisamide	

Spare Parts

Part Number	Product Description	Packaging
10007628	Drying Nozzle Tip	Set of 2
10007629	Mixing Nozzle Gasket	Set of 3
10008795	Sample Probe	1 each
10008796	Reagent Probe	1 each
10008797	Probe Packing	Set of 3
10007622	Pure Water Filter	Set of 5
10007623	Washing Solution Filter	Set of 5
10007621	Halogen Lamp	1 each
	Extra Sample Trays	
10009119	Sample Tray # 3	1 each
10009120	Sample tray # 4	1 each
10009121	Sample Tray # 5	1 each
10009122	Sample Tray # 6	allow 6-8 wk delivery
10009123	Sample Tray # 7	allow 6-8 wk delivery
10009124	Sample Tray # 8	allow 6-8 wk delivery
10009125	Sample Tray # 9	allow 6-8 wk delivery
10009126	Sample Tray # 10	allow 6-8 wk delivery
10009127	Extra Reagent Tray	1 each

Consumables

Part Number	Product Description	Packaging
10007624	Reaction Cuvettes	Bag/60 pcs
10007625	Reagent Bottle 60mL (with cap)	Set of 20each
10007626	Reagent Bottle 40mL (with cap)	Set of 20each
10007627	Reagent Bottle 20mL (with cap)	Set of 20each
10007636 NEW	Sample Cup Holder	Bag/10 pcs
100262	Acid Washing Solution	500mL Kit (2 x 500mL)
100263	Base Washing Solution	500mL Kit (2 x 500mL)
10009118	Thermal printer paper	2 3/8" x 2" 95ft roll 24/case
10010582	Sample Cups (Hitachi type cups)	1000/bag
10010235	Sample Tubes, plastic, 15x75mm	1000/case

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