

HumaStar 180

| Autoanalyzer for all
Clinical Chemistry and Turbidimetric Tests

Clinical Chemistry

- > Flexible
- > Cost Efficient
- > Easy to Operate



human

Diagnostics Worldwide

HumaStar 180

State-of-the-Art Random-Access and Batch Analyzer
for all Kinds of Laboratories

FAST

- > 180 tests/hour
- > Direct reading
- > Random access
- > STAT function
- > 2 independent needles



2 heated pipetting needles
for sample and reagent

FLEXIBLE

ANALYSIS MODES

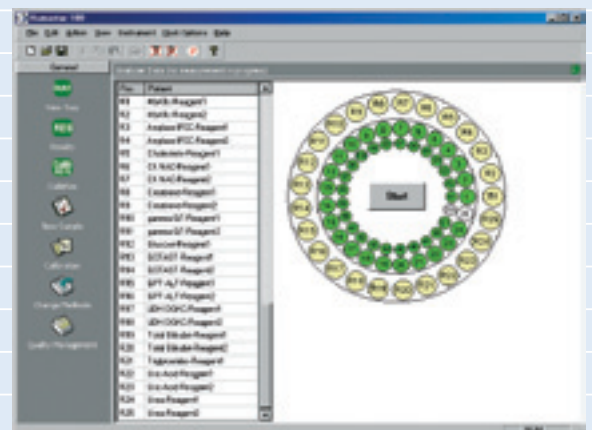
- > Endpoint (substrates)
- > Kinetic (enzymes)
- > Initial rate
(fixed-time kinetics)
- > Immunoturbidimetry
- > Bichromatic

CALIBRATION MODES

- > Single standard
- > Multi-calibrator
- > Fix factor

EASY OPERATION

- > Intuitive,
easy-to-use software
- > Built-in quality
management
(Levy Jennings)



CAROUSEL

- 25 reagent positions
- 50 sample positions
for serum cups
or primary tubes
- 300 cuvettes
for tests





CUTTING-EDGE TECHNOLOGY

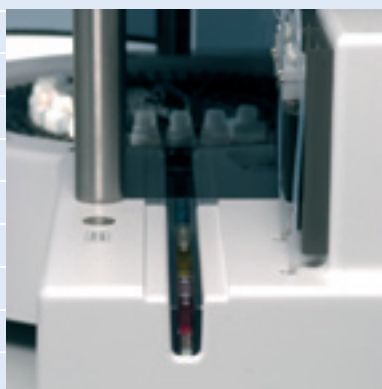
- > Versatile photometer
- > Excellent precision
- > LED technology and photodiode detection
- > Heated pipetting needles
- > High-pressure washing station



2 independent liquid channels for precise pipetting of reagent and sample

PHOTOMETER

- > 5 built-in photometers
- > 5 standard wavelengths: 365, 405, 505, 546 and 620 nm
- > 4 channels per photometer
- > Resolution: 0,0001 ABS



CUVETTE TRANSPORT

Temperature-controlled at 37°C

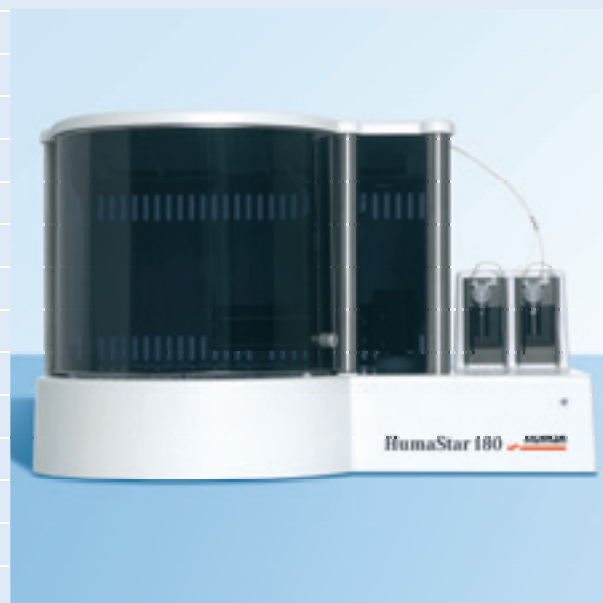
COST EFFICIENT

- > Excellent, market proven reliability
- > Maintenance-free photometer
- > No lamp replacement required
- > Minimal yearly maintenance



WASHING STATION

Efficient cleaning procedure to avoid carry-over and contamination



HumaStar 180 230/110 Vac, 150 VA

Cat. no. 16900

HumaStar 180

INSTRUMENT SPECIFICATION

Access Modes	<ul style="list-style-type: none"> > Random access > Optimized batch > STAT (immediate access and execution)
Processing Modes	<ul style="list-style-type: none"> > Dynamic scheduler patient by patient
Analysis Modes	<ul style="list-style-type: none"> > Endpoint (substrates) > Kinetic (enzymes) > Initial rate (fixed time kinetics) > Serum blank (differential) > Turbidimetric (immunoturbidimetry) > Multi-standard (quantitative) > Bichromatic > Multi-chemistry
Throughput	<ul style="list-style-type: none"> > up to 180 tests/hr under speedoptimized conditions
Carousel	<ul style="list-style-type: none"> > 25 reagent positions > 50 sample positions (random access) > 300 test positions (75 x 4 cuvettes)
Liquid Handling	<ul style="list-style-type: none"> > 2 independent syringes: <ul style="list-style-type: none"> Sample: 3–250 µl in 1 µl steps Reagent: 5–999 µl in 1 µl steps > CV less 2% for volumes > 10 µl > Highpressure washing > Autocleaning > Backflush function > Easy maintenance
Temperature Control	<ul style="list-style-type: none"> > OPTIONAL reagent cooling (ambient minus 10 °C) (water circulation w/ external cooler) > Cuvette heating (electrical) in carousel and reading path: 37 °C

Measurement	<ul style="list-style-type: none"> > Maintenance free!
System	<ul style="list-style-type: none"> > Light sources: LED > Detectors: photodiodes > Temperature controlled > 5 built-in photometers, 4 channels each > 20 independent channels > Standard filters: <ul style="list-style-type: none"> 365, 405, 505, 546 & 620 nm (4 each) > Resolution: 0,0001 ABS > Accuracy: < 1% CV at 1 ABS / 405 nm > Linearity: 0.0000 – 3.0000 OD better than +/- 1% > Drift: less than 0.001 OD / hr
Power Requirements	<ul style="list-style-type: none"> > 85–264V, 50/60 Hz (auto detecting) > Power consumption: max 150 VA > Mains fuse: 2 x 2 A T (slow blow)
Measures	<ul style="list-style-type: none"> > Dimensions: 810 x 550 x 550 (w x d x h) > Weight: 28 kg
Environmental	<ul style="list-style-type: none"> > Operation: 18–35 °C, 10–90% rel. hum. > Storage: 40–70 °C, 5–95% rel. hum.
Options	<ul style="list-style-type: none"> > Level sensors system for wash and waste container > Handheld barcode reader for pos. sample ID
Disposables	<ul style="list-style-type: none"> > Cuvette block for 4 tests each > Reagent bottles > Serum cups