



ISCUS *flex*

MICRODIALYSIS ANALYZER



- ▶ Third generation Microdialysis Analyzer for advanced research
- ▶ Monitoring up to eight subjects
- ▶ Batch analysis capacity of 16 samples

Continuous Monitoring of Metabolic Markers

ISCUS^{flex} is the third generation Microdialysis Analyzer for advanced research. The analyzer uses enzymatic reagents and colorimetric measurements to monitor levels of glucose, lactate, pyruvate, glycerol, glutamate and urea from microdialysis samples taken from virtually any tissue or organ in the body.

MICRODIALYSIS is a monitoring technique for continuous sampling of tissue and blood chemistry. Chemical substances in the interstitial fluid or blood plasma are sampled by a microdialysis catheter or probe and analyzed in the ISCUS^{flex}.

CMA offers probes and catheters for monitoring the brain, liver, abdomen, muscle, adipose tissue, blood and skin.

Enhanced Features and Optimized Performance

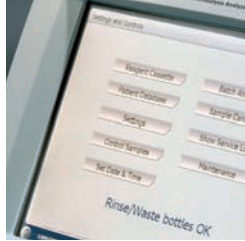
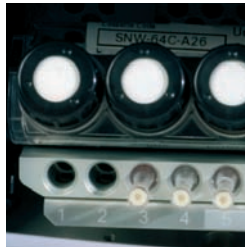
ISCUS^{flex} combines reliability and flexibility. This benchtop analyzer offers the opportunity to monitor up to eight subjects at a time. With a capacity of 16 vials, ISCUS^{flex} offers batch analysis for advanced research.

THE ANALYZER is easy to operate with a new and improved graphical user interface. Up to six different reagents and automated control samples provide unique opportunities to determine the levels of all these energy metabolites and markers within one sample, within 2 minutes each. Data is displayed as trendcurves for easy and fast interpretation. In research, microdialysis samples are generally acquired using higher flow rates (1 - 5 µL/min) which result in lower analyte recoveries. In order to facilitate the analysis of these samples, the ISCUS^{flex} can be configured to use more sensitive methods for low level analysis of the following compounds: glucose, lactate, pyruvate and glycerol.

Available Reagents:

- Glucose
- Lactate
- Pyruvate
- Glycerol
- Glutamate
- Urea

THE STATE OF THE ART ISCUS^{flex} offers reliability and flexibility combined into a single unit.



KEY FEATURES:

- Continuous and near real-time monitoring of metabolites sampled by CMA's suite of probes and catheters
- High flexibility with the opportunity to monitor up to eight subjects simultaneously, and a total of 16 catheters or probes
- Quick one-button analysis in less than two minutes. Six available reagents: glucose, lactate, pyruvate, glycerol, glutamate and urea
- Removable vial cassette with 16 positions for batch analysis. ISCUS^{flex} is capable of running low concentration samples for research purposes
- Automatic flushing of sample after analysis, automatic calibration and quality control
- A new and improved graphical user interface makes it easy to operate
- ISCUS^{flex} is delivered with the ICUpilot™ software that enables you to visualize, compare and compute your data on a separate computer

NORMAL LINEAR RANGE

REAGENT	LINEAR RANGE	SAMPLE VOLUME	REAGENT VOLUME
Glucose	0.1 - 25 mmol/L	0.5 µL	14.5 µL
Lactate	0.1 - 12 mmol/L	0.2 µL	14.8 µL
Pyruvate	10 - 1500 µmol/L	0.5 µL	14.5 µL
Glycerol	10 - 1500 µmol/L	0.5 µL	14.5 µL
Glutamate	1 - 150 µmol/L	1.0 µL	5.0 µL
Urea	0.5 - 25 mmol/L	0.5 µL	14.5 µL

LOW LINEAR RANGE

REAGENT	LINEAR RANGE	SAMPLE VOLUME	REAGENT VOLUME
Glucose	0.02 - 6.0 mmol/L	2.0 µL	13.0 µL
Lactate	0.02 - 2.5 mmol/L	0.8 µL	14.2 µL
Pyruvate	2 - 300 µmol/L	2.0 µL	13.0 µL
Glycerol	2 - 500 µmol/L	2.0 µL	13.0 µL

TECHNICAL INFORMATION

DIMENSIONS 430 (H) x 350 (W) x 270 (D) mm

WEIGHT 29 lbs/13 kg

VOLTAGE 100-240 V~, 50/60 Hz

POWER CONSUMPTION 100 VA

TYPE OF PROTECTION Class 1, Type B

MEASUREMENT PRINCIPLE Kinetic enzymatic analyzer

VIALS Microvials, CMA Plastic or Glass vials

SAMPLES Microdialysates

MIN. SAMPLE VOLUME Sum of sample volumes per analyte + 2 µL

PIPETTING IMPRECISION <2 % (0.5 µL) rel. standard deviation

CALIBRATION Automatic (every 6 hrs)

WARM-UP TIME 10 minutes

MEASURING TIME 30 seconds

THROUGHPUT TIME/TEST 90 seconds

DETECTOR TYPE Single beam filter photometer

LIGHT SOURCE Class 1 LED

WAVELENGTHS 375 and 530 nm

DETECTOR CELL Capillary flow cell 10 mm, 2 µL

DETECTOR CELL Temperature 99 °F/37 °C

ASSAY IMPRECISION <4 % rel. standard deviation within run for "Control Samples Normal"

ASSAY INACCURACY <10 % for Control Sample Normal

ORDERING INFORMATION

Ref. No.

ISCUS^{flex} Microdialysis Analyzer, For Research Use Only

8003296

ACCESSORIES

Reagent Set A, Glucose, Lactate, Pyruvate, Glycerol, Calibrator A

8002163

Reagent Set B, Glucose, Lactate, Pyruvate, Glycerol, Glutamate, Calibrator A

8002164

Reagent Set C, Glucose, Lactate, Pyruvate, Calibrator A

8002165

Glucose Reagent, 5/pkg

P000023

Lactate Reagent, 5/pkg

P000024

Pyruvate Reagent, 5/pkg

P000063

Glycerol Reagent, 5/pkg

P000025

Glutamate Reagent, 5/pkg

P000064

Urea Reagent, 5/pkg

P000026

Calibrator A, 10/pkg

P000057

Control Samples, 3 levels, 3x3/pkg

8010201

Vial Plastic, 300µL, 1000/pkg

7431100

Vial Glass, 300µL, 500/pkg

7431007

Rinsing fluid, 0.5 L, 8/pkg

8002171

Waste bottle, 0.5 L, 8/pkg

8002161

Thermal print paper, 30.5 m, 4/pkg

8002162

Sample Cannula, 1/pkg

8001721

Vial Cassette, 1/pkg

8003409

Secure Digital Memory Card, 1/pkg

8002360

LABpilot™ Software

P000157

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