

# MAGPIX<sup>®</sup>



## System Specifications

### Accuracy and Precision

- Sample uptake volume  $\pm 5\%$
- Classification of microspheres  $>80\%$
- Misclassification of microspheres  $\leq 2\%$
- Distinguishes 1 to 50 unique xMAP<sup>®</sup> microspheres in a single sample
- Temperature control  $\pm 1^\circ\text{C}$  of target
- Sample carryover  $\leq 4\%$
- Soluble background fluorescence emissions at  $590\text{ nm} \pm 24\text{ nm}$  automatically subtracted from fluorescence intensity values

### Sensitivity

- Detect  $\leq 700$  fluorochromes phycoerythrin (PE) per xMAP microsphere

### Optics

- Reporter channel, LED excitation:  $511\text{nm} \pm 27\text{ nm}$
- Minimum reporter channel dynamic range: 3 decades of detection
  - Typical Dynamic Range:  $\geq 3.5$  decades of detection
- Reporter / Classification detector: CCD
- Reporter / Classification A/D resolution 16 bits
- Focus Lens: 5x magnification

### Fluidics

- 96 well plate capability with additional off plate reagent area
- Piercing probe capability
- Auto adjusting probe capability
- Sample uptake volume  $20\mu\text{L} - 200\mu\text{L}$ .
- Internal / removable drive bottle and waste bottle
- Disposable Drive bottle volume:  $650\text{mL}$  (8 plates)
- Waste bottle volume:  $850\text{mL}$

### Electronics:

- USB 2.0 communications
- Input voltage range:  $100 - 120$  or  $200 - 240\text{ VAC}$  and  $50 - 60\text{Hz}$

### Setup

- Installation  $\leq 2$  hours
- System calibration  $< 10$  minutes

### Capacity

- Analyze multiple 96-well plates per batch
- Analyze multiple assay templates per plate
- Automatic sampling from a 96-well plate. The following microtiter plates are compatible with the MAGPIX plate holder: flat bottom, conical, round, filter bottom, [overall height no more than  $0.75''$  ( $19\text{mm}$ )], any color
- Drive and waste bottles hold enough volume to run up to eight 96-well plates between refills
- Detect and distinguish surface reporter fluorescence emissions at  $590\text{ nm} \pm 24\text{ nm}$  on the surface of 1-50 unique xMAP microsphere sets in a single sample

### General

- Physical dimensions:  $16.5\text{cm}$  (6.5 inches) W x  $60\text{cm}$  (23.5 inches) D x  $43\text{cm}$  (17 inches) H. Additional space required for the monitor/PC stand, keyboard, mouse and barcode scanner does not exceed  $64.8\text{cm}$  (25.5 inches) W x  $61\text{cm}$  (24 inches)
- Weight: up to  $18\text{kg}$  (40lbs)
- Operating Environment:
  - Temperature:  $15^\circ\text{C} - 35^\circ\text{C}$  ( $59^\circ\text{F} - 95^\circ\text{F}$ )
  - Humidity:  $20\% - 80\%\text{RH}$ , non-condensing

**General (continued)**

- Altitude: up to 2400m (7874 ft) above mean sea level
- Temperature control: Maintains samples at a constant temperature from 35 °C - 60 °C (95°F - 131 °F)
  - Warm up time: 15 minutes
- Plate throughput time: ≤ 60 minutes

**Monitor Specifications**

- Screen resolution and number of colors: SXGA 1280 x 1024 with 32-bit color
- Screen size: 43cm (17")

**PC Specifications**

- Processor: 2.8 GHz Intel® Core 2
- Main memory: 4 G RAM

- Hard disk drive: 160 GB
- Communication/Ports: four USB version 2.0 compatible high speed ports
- DVD-RW drive
- Operating system: Microsoft® Windows® XP Professional, SP3
- All Luminex instrumentation is CE and Safety Agency marked (MET and/or UL and/or TUV and/or NEMKO) to electrical/safety device standards. For details on approvals and standards compliance please contact Luminex.

**Order Information**

- Contact your Luminex Sales Representative

For technical support, call: 877-785-2323 (U.S. and Canada) or +1 512-381-4397 (International)

Fax: 512-219-5114

E-mail: [support@luminexcorp.com](mailto:support@luminexcorp.com)

Luminex Corporation  
12212 Technology Blvd.  
Austin, Texas 78727  
[www.luminexcorp.com](http://www.luminexcorp.com)