

# MCA 4000

## MULTI-CHANNEL ANALYZER

**MAXIMIZE SIMULTANEOUS  
PARTICULATE PROFILING  
WITH A 4K+ CHANNEL  
SPECTRUM  
FOR AIRBORNE  
PARTICULATE BETWEEN  
0.3 & 10.0 MICRONS**



Introducing the latest technological innovation from Met One Instruments, Inc., the **MCA 4000 Multi-Channel Analyzer**. This instrument is a complete particulate counting and sizing measurement system that provides a 4,096 channel spectrum for airborne particulate between 0.3 and 10.0 microns. The MCA 4000 utilizes light scatter technology, and sheath air is used to prevent contamination of internal optics of the instrument. It is designed to collect a one-minute (selectable) sample

for output to your desktop or laptop computer. Not only does the supplied PC software display a graph of the resultant sample and store the data for later analysis, but it also has a variable display function for magnified resolution of any part of the graph. Variable selection of the graph allows the user to zero in and highlight an area of interest. For highest resolution and maximum flexibility, the output of the MCA 4000 is displayed on your computer's high-resolution screen. Four thousand channels calls for a big screen!

## MCA 4000 MULTI-CHANNEL ANALYZER



### IDEAL FOR:

- WORKPLACE MONITORING
- INDOOR AIR QUALITY
- AEROSOL RESEARCH
- TESTING FILTER MATERIAL
- CONTROLLED ENVIRONMENT QUALITY CONTROL

Met One's MCA 4000 is battery operated for convenient, portable use for up to 9 hours of continuous operation. Connect the AC adapter/charger for longer operation and battery charging. The instrument is housed in a portable stainless-steel enclosure complete with a handle for easy transportation, and only requires your computer to place in operation. The large touch screen display is used to easily display data and/or update user configuration settings such as sample period, measurement units, and measurement sizes.

Under typical operation, particles are sampled through an isokinetic inlet. This allows the instrument to sort particles into 4000+ channels by count size. Data is continually updated to the computer. If the software is not being utilized, the MCA will still be able to sample and store data.

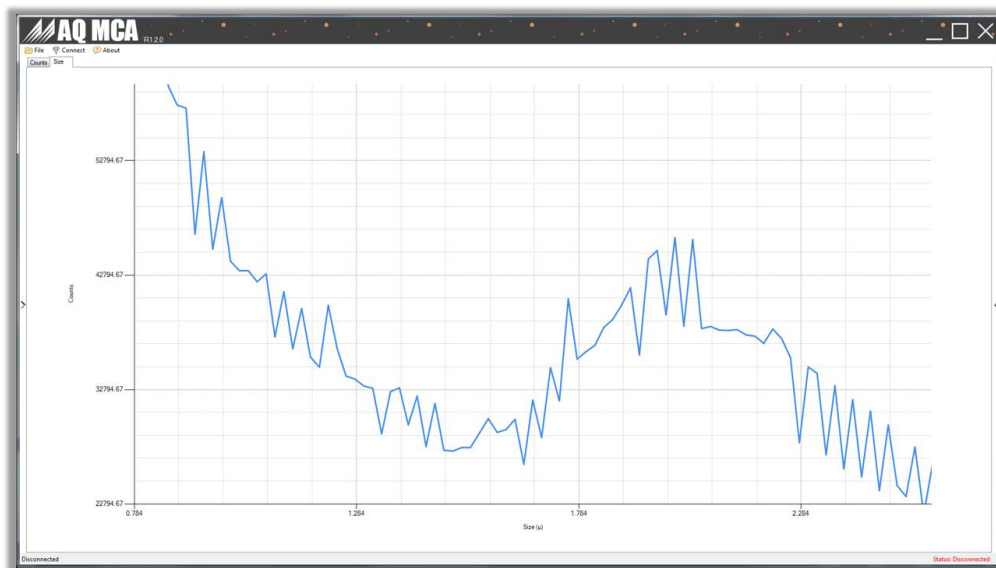


# MCA 4000 MULTI-CHANNEL ANALYZER

## TYPICAL SOFTWARE DATA DISPLAY



**ZOOM IN FOR  
HIGH-RESOLUTION  
DATA ANALYSIS**



## OPTIONAL ACCESSORIES

- Swift 6.0 Flow Meter
- Serial Cable
- USB Cable
- ISO 21501-4 Calibration Certificate

**CONTACT OUR SALES TEAM TODAY FOR A QUOTE:**

**[SALES@METONE.COM](mailto:SALES@METONE.COM)**

## PARAMETER

### Interface

Display 640 x 480 Touch Screen Display

### Performance

Particle Size Range 0.3  $\mu\text{m}$  - 10  $\mu\text{m}$ , 4,096 channels  
Calibrated Sizes 0.3, 0.5, 0.7, 1.0, 2.0, 3.0, 5.0 and 10.0  $\mu\text{m}$

Concentration Range 0 – 9,000,000 particles per cubic foot (300,000 particle/L)

Accuracy  $\pm 10\%$  to calibration aerosol  
Sensitivity 0.3  $\mu\text{m}$   
Flow Rate 1 LPM  
Sample Time User settable: 1 Min, 5 Min, 10 Min, 15 Min, 30 Min, 1 Hr  
Sheath Flow Rate 1 LPM

### Electrical

Light Source Laser Diode, 100 mW, 785 nm  
Power 14.8 V Li-Ion self-contained battery pack – Provides for 9 hours, 7 minutes continuous use. Full recharge approximately 3 hours.  
AC Adapter/Charger Li-Ion Charger, 100 – 240 VAC to 16.8 VDC @ 1.8 A USB,  
Communications RS-232 or RS-485, USB  
Standards Meets ISO 21501-4. ISO 9001 manufacturing facility.

### Physical

Weight 8 lbs 10 oz. (3.91 kg)  
Size Height = 8.75" (22.2 cm) With Handle = 10.25" (26.0 cm)  
Width = 6.75" (17.1 cm) Depth = 8.5" (21.5 cm)

### Environmental

Operating Temperature 0° to +40°C  
Storage Temperature -20° to +50°C

## SUPPLIED ACCESSORIES

- Operator's Manual
- Calibration Certificate (NIST)
- Zero Count Filter
- Power Cord
- Software Available from Website

*Specifications are subject to change at any time.*

