

ION CHAMBERS



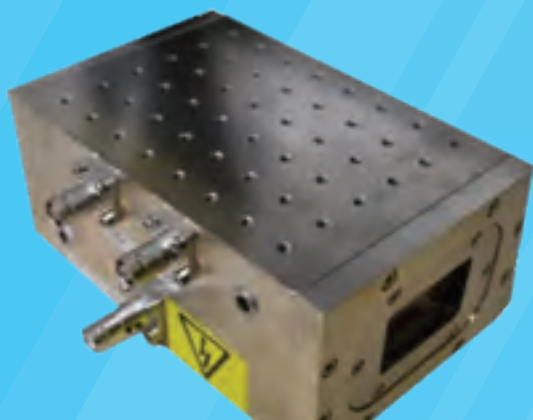
- Precise low noise X-ray measurement
- Designed for air, vacuum, or ultra-high vacuum operation
- Beam position monitor capability
- Excellent track record with operational usage in world renowned synchrotrons



MIC-205



IC-400-50-XY
Beam monitoring positioning in both X&Y



IC-500 Series



IC-400-50

ADC's ion chambers are designed for precise, low noise x-ray measurement. The electrodes are constructed of nickel plated copper on fiberglass supports, all housed within a nickel plated aluminum frame. Each electrode is connected to an SHV connector. 1/4" push to connect style fittings comprise the gas connections. The system can be configured for air, vacuum, or ultra-high vacuum operation through one of three interfaces. The air system stands alone mounted to the system table. The vacuum configuration interfaces through a NW40 style bulkhead fitting. The UHV version replaces the Kapton windows with beryllium windows and interfaces through a tapped DN63 CF flange. One Unique feature of ADC's precision ion chambers is the incorporation of a split collector plate. The electrode is split in a saw tooth configuration with a height of approximately 10mm that, when the differential current is computed, allows the use as a beam position monitor.

For more information, please visit: http://www.adc9001.com/products/show_list/id/173

IC-400 Series

IC-400-50

Window Aperture : 25mm x 40mm

Electrode Length : 50mm



IC-400-100

Window Aperture : 25mm x 40mm

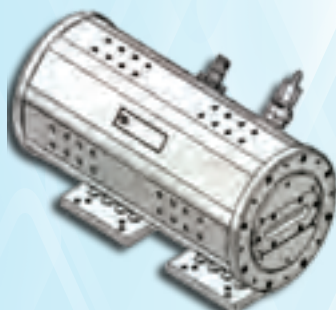
Electrode Length : 100mm



IC-400-200

Window Aperture : 25mm x 40mm

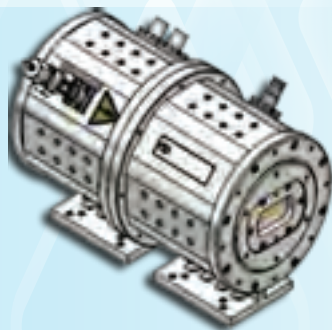
Electrode Length : 200mm



IC-400-50-XY

Window Aperture : 25mm x 35mm

Electrode Length : 50mm



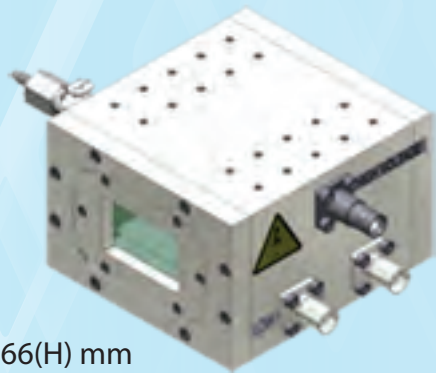
The following parameters apply for all ion chambers listed above:

- Kapton Window : 25, 50, and 125 μ m
- Body Material : Aluminum 6061
- Electrodes : Gold Plated with Guard Rings
- Working Pressure : 0.7-1.3 Bar Absolute Pressure
- Operating Potential : Up to 1.7 kV
- Dimensions : 113.8(W) x 104.3(L) x 113.8(H) mm (without base)
- Low Voltage Electrode : Female BNC Panel Mount connector
- High Voltage Electrode : SHV RF Panel Mount connector

For more information, please visit: <http://www.adc9001.com/IC-400-Series>

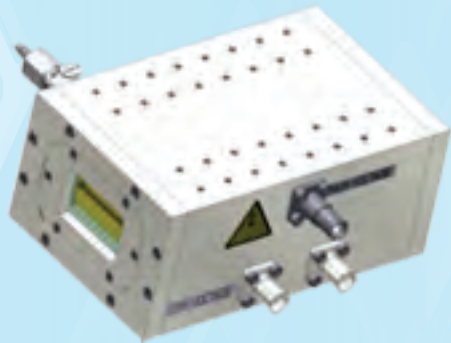
IC-500 Series

IC 500-50



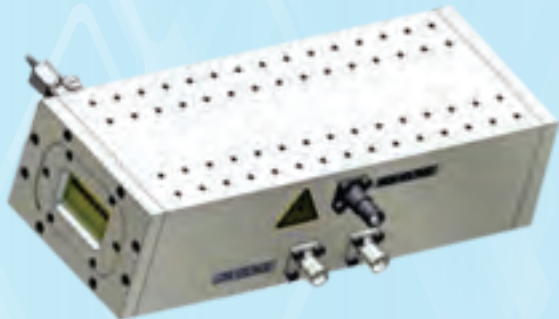
Electrode Lengths : 50mm
Dimensions : 96.75(W) x 104.3(L) x 66(H) mm

IC 500-100



Electrode Lengths : 100mm
Dimensions : 96.75(W) x 154.3(L) x 66(H) mm

IC 500-100



Electrode Lengths : 200mm
Dimensions : 96.75(W) x 254.3(L) x 66(H) mm

The following parameters apply for all ion chambers listed above:

Window Aperture	:	25mm x 40mm
Kapton Window	:	25, 50, and 125 μ m
Body Material	:	Aluminum 6061
Electrode Gaps	:	10, 15, 20 and 25mm
Working Pressure	:	0.7-1.3 Bar Absolute Pressure
Operating Potential	:	Up to 1.7 kV
Low Voltage Electrode	:	Female BNC Panel Mount connector
High Voltage Electrode	:	SHV RF Panel Mount connector

For more information, please visit: <http://www.adc9001.com/IC-500-Series>

Custom Configuration

ADC has designed and built hundreds of custom ion chambers for different synchrotron facilities around the world. The standard design is modified to meet customer specific requirements (special connectors, environments, collector plate separation distance) for their beamline. The following shows some examples of custom ion chambers ADC designed and built:



ANKA Karlsruhe Institute of Technology KIT, Germany



Advanced Photon Source USA



Advanced Photon Source USA



Australian Synchrotron Australia



Canadian Light Source Canada



ALBA Cells, Spain



Diamond Light Source, UK



X-ray Beam Monitor (XBM) Photodiode



Advanced Photon Source USA

Contact ADC for a quote today by sending us your specific requirements.

For more information, please visit:

http://www.adc9001.com/products/show_list/id/175

Micro Ion Chamber MIC-205

Compact/small enough to be positioned near the sample

Used currently at world renowned synchrotrons



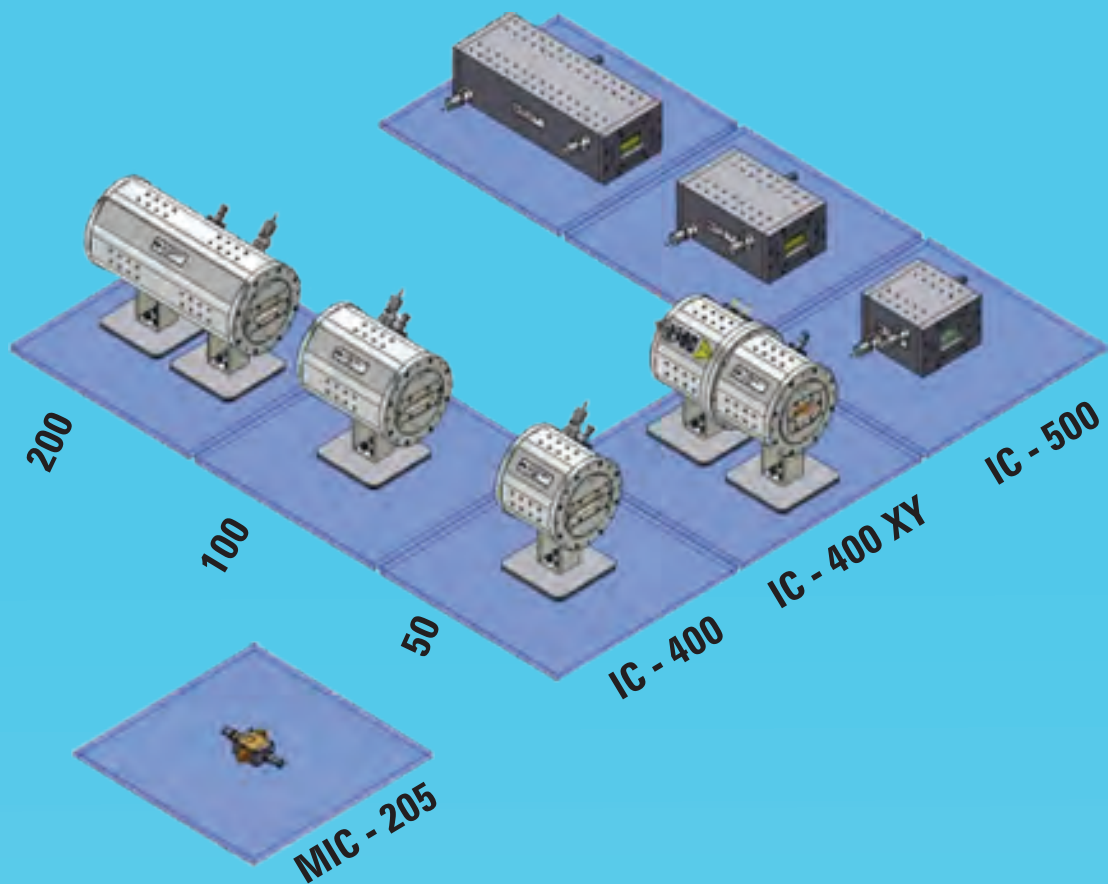
A small ionization chamber detector has been developed for monitoring the intensity of hard X-ray beam for Synchrotron facilities around the world. The small dimensions of the ionization chamber (20 mm along the beam direction and 30 mm perpendicular to it) make it possible to place it very close to the sample.

The housing of the detector is made of stainless steel, nickel-plated copper electrodes, SHV and BNC electrical connectors, and gas connectors.

Spark voltage is approximately 5500V under the atmospheric environment and leakage rate of gas is less than 2 torr/5 minutes under 10 torr vacuum environment.

For more information, please visit: <http://www.adc9001.com/MIC-205>

Ordering Information



- Repeatability
- Proven Technology
- Custom Configuration Available
- Reliability
- Unique Features

Contact ADC USA, Inc. today for more information on our Ion Chambers or to request a quote!

Email : adc@adc9001.com

Phone : 607.533.3531

Web : <http://www.adc9001.com>