Ion Chambers





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. ¼" 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 IC-400 & IC-500 series precision ion chambers incorporate a split collector plate. The electrode is split in a saw tooth configuration with a height of approximately 10mm, 15mm, and 25mm such that, when the differential current is computed, allows use as a beam position monitor.

IC-400 Series				
IC-400-50	IC-400-100	IC-400-200	IC-400-50-XY	

	IC-500 Series	
IC-500-50	IC-500-100	IC-500-200

Specifications

Windows	25μm Kapton foil factory installed + Kapton film kit included:	
	25, 50, 125μm	
Body Material	Aluminum alloy	
Electrode Gaps	10, 15, 20, 25mm (User adjustable)	
Electrodes	Gold plated with guard rings	
Working pressure	0.7 - 1 .3 Bar Absolute	
Operating potential	Up to 1 .7 KV	
Maximum pressure	<.0375 bar/min	
drop		
Gas Connectors	<u>Chamber Gas Fitting:</u>	
	1002, 1/4" hose 'push-to-connect'	
	<u>Gas Adapter Insert:</u>	
	MCD2202 1/8" hose barb in-line coupling	
Electrical	Low Voltage Electrode:	
Connectors	Standard 50ohm Female BNC	
	<u>High Voltage Electrode:</u>	
	Standard SHV	
	<u>Gridded Option:</u>	
	Standard SHV	
Adapter Kits	NW25 IC-400 Adapter Kit,	
(ONLY AVAILABLE	NW40 IC-400 Adapter Kit	
FOR 400 SERIES)	NW50 IC-400 Adapter Kit	
	4.5" IC-400 Conflate Adapter Kit	

Micro Ion Chamber



The MIC-205 monitors the intensity of hard X-ray beam. 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.

Gridded Ion Chamber

Using ADC's new gridded ionization chamber, the ionization current reacts only to the presence of electrons within the electric field while the ion charges are ignored. Eliminating the effects of the slow-moving ions reduces the rise time by roughly at least 10 orders of magnitude. ADC has developed this design as an add-in to its entire ion chamber line.



Electrical Hook Up

Non-Gridded





Who we are

ADC USA Inc. located near Cornell University in Ithaca, New York, is a leading developer and supplier of complex scientific components and instruments for large government laboratories and corporations around the world. Founded as a privately held company in 1995, ADC has grown into one of world's leading technology companies and has enjoyed 18 straight years of business growth and profitability with more than 500 customers located in over 26 countries. ADC's vision is to be a global leader in the development and manufacturing of innovative products for scientific and research markets.

Contact Us

126 Ridge Road Lansing, NY, 14882

Phone: (607) 533-3531 Email: adc@adc9001.com Web: www.adc9001.com



Advanced Design Consulting Inc.



126 Ridge Road Lansing, NY, 14882

