

X3 Chemical Resistant Chilled Mirror Sensor

Edgetech Instruments **NEW X3 Chemical Resistant Chilled Mirror Sensor** exploits the latest advancements in optical sensing and is ***specifically designed for demanding Process and Laboratory applications.*** It also offers the advantages of **low dew point detection** and **rapid response**.

Available in multiple configurations to accurately measure dew point in aggressive background gases including Ammonia, HCl, SemiCon Gases, Peroxides, Medical Gases, and other reactants.

The Primary Standard Chilled Mirror technique directly measures dew point and provides absolute knowledge of moisture content. As an added benefit to precision and chemical resistance, the X3's minimized sample cavity results in rapid dry-down times, fast response, and quick detection of upset process conditions.

It is modular in design to accommodate desired characteristics such as chemical compatibility, wide dew point measurement capability, wetted materials of construction, mounting arrangement, and choice in sample port fitting styles.

Based on the demands of the application,

Sample Chambers are available in:

- 316 Stainless Steel
- Teflon
- Hastelloy

Sensor Mirrors are available in:

- Chrome Plated
- 316 Stainless Steel
- Platinum

Sensor Optical Windows are available in:

- Glass
- TPX

Sample Fittings are available in:

- Compression Fittings
- VCR or VCO
- Stainless Steel or Hastelloy



Edgetech Instruments Inc.

An ISO 9001 Certified Company

399 River Road . Hudson . MA . 01749

Main: +1 (508) 263-5900 . Fax: +1 (508) 486-9348

www.edgetechinstruments.com

Rugged and compact, the X3 may be mounted within several Edgetech Instruments laboratory, process, and OEM analyzer packages- Stationary and portable configurations.

FEATURES:

- New improved *chemically resistant* sensor housing and mirror **eliminate sensor failures** when measuring DewPoint in aggressive chemical background gases.
- Chamber design and high efficiency heat exchanger result in the ability to measure very **low dew points!**
- New hinged cover plate allows **easy access** to the mirror for cleaning and inspection
- New reduced cavity sample chamber speeds up sample sweeping resulting in **rapid dry-down time** after exposure to high moisture levels. This results in more up-time in your lab or process
- **Super-Fast reaction time** in detecting upset conditions from dry atmospheres can **improve product yields** and eliminate process down-times .
- Rugged, industrial electrical connectors and easy access slim line signal harness simplify installation and maintenance. This can result in **reduced down-time**.

Specifications

DEW POINT RANGE: **Chilled Mirror Sensor Heat Exchangers** are available configured:

- Air Convection: 65C depression
- Standard Fan Cooled: 85C depression
- High Efficiency Fan Cooled: 95C depression
- Standard Liquid Cooled: 115C depression (-10C chilled liquid)
- Cryo-Cooled: 125 Depression (-30C refrigerant)

PRESSURE RANGE: 0-200 PSIG

TEMPERATURE RANGE: -40 TO +125C

THERMAL ELECTRIC CHILLER TYPE: Three Stage Micro TEC

ENVIRONMENTAL: Dust and Water Resistant

MAXIMUM DEWPOINT CAPABILITY (dependent upon model of Edgetech Instrument):

Model	Description	Max Depression	DP@25C
X3-P	Passive Air Cooled with Finned Heat Sink	65C	-40C
X3	Passive Panel Mount, heat sink through panel	70C	-45C
X3-F	Active, Standard Fan Cooled	85C	-60C
X3-SF	Active, High Efficiency Super Fan Cooled	95C	-70C
X3-L	Active, Liquid Cooled (0C)	115C	-90C
X3-C	Active, Cryo- Direct Refrigerant Cooled	125C	-100C

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