DESCRIPTION

The xWatch® Surveillance Camera produces a high resolution color video picture using a camera module that is mounted inside an explosion-proof NEMA 4X rated housing. The device's explosion-proof rating makes it suitable for Class I, Div. 1, Groups B, C and D locations. xWatch can be used alone or in combination with fire and gas detectors in any application that requires CCTV surveillance capabilities.

The xWatch can be used in any of three configurations:

- xWatch can be used as a stand alone device to perform typical CCTV functions.
- An xWatch camera module can be retrofitted in place of the UV tube module in an existing C7050 Flame Detector to provide basic visual information.
- xWatch can be ordered from the factory as a combined unit with any X-Series flame detector. With this arrangement, the camera views the same protected area as the detector.

In the event of a fire or gas alarm, the operator can immediately view the monitored area to determine whether personnel are present and safe. An accurate evaluation of the hazard's size, nature, location and severity can be determined quickly and safely.

The use of a digital video recorder (DVR) to capture the event provides a permanent record for future analysis of what occurred.

HIGHLIGHTS

xWatch Camera

▲ Low cost surveillance of any flame, gas, or toxic hazard location

▲ Easy connection to a video switcher using twisted pair wiring

▲ Use existing wiring if suitable

▲ Easy retrofit into standard C7050 housing

▲ Simple no tool exchange of the tube module to camera

▲ Compact housing for easy installation in small spaces

xWatch / Flame Detector Combination

▲ Combines high resolution color video surveillance and flame detection

▲ Views the same 90 degree cone of vision as the flame detector

▲ Combine with any X-Series flame detector

▲ Superior false alarm rejection

▲ Real verification of detection capability with automatic and magnetic optical integrity

▲ Combine with detector system upgrades in remaining unused detector locations

▲ Compatible with LON based detectors

▲ Ideally suited for remote and/or inaccessible areas

▲ Informed, appropriate response to incidents

▲ Pre- and post-event analysis of video recording

Operating Temperature   –20°C to +70°C (–4°F to +158°F)

Hazardous Location Rating   –40°C to +75°C (–40°F to +167°F)

Storage Temperature   –30°C to +80°C (–22°F to +176°F)

Relative Humidity   5 to 95%, non-condensing

Ingress Protection   NEMA/Type 4X

Sensor   Color low light CCD

Resolution   NTSC: 768 by 494 pixels, 570 lines of resolution
PAL: 752 by 582 pixels, 570 lines of resolution

Video Output   NTSC or PAL two wire twisted pair

Shutter   Electronic shutter, 1/60 – 1/100,000 second

Operating Voltage   24 Vdc nominal, 18 to 30 Vdc

Power Consumption   2.8 watts

Field of View   90 degrees

User Interface   Conventional off-the-shelf video switchers and controllers can be used for the interface.

Housing Material   Aluminum or Stainless Steel (316/CF8M Cast)

Shipping Weight (Approximate)
Aluminum: 1.2 lbs. (0.6 kg)
Stainless Steel: 2.2 lbs. (1.0 kg)

Certifications

FM/CSA: Class I, Div. 1, Groups B, C and D (T5). Class II/III, Div. 1, Groups E, F, and G (T5). NEMA/Type 4X.
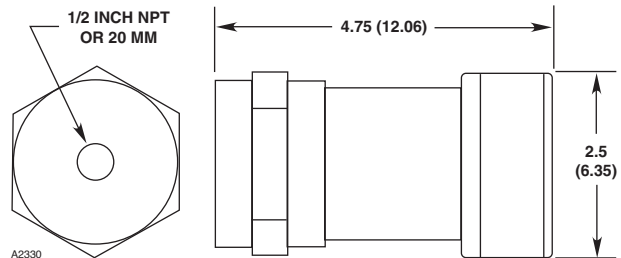
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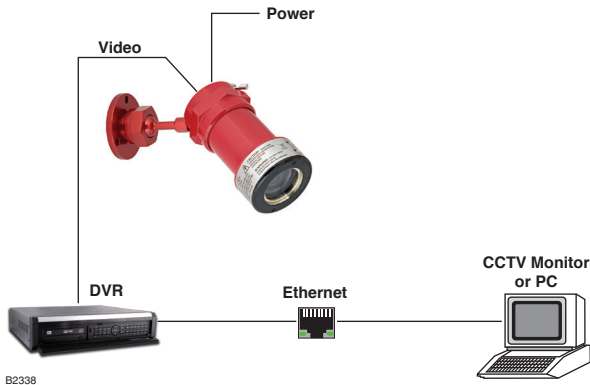FM07ATEX0053
Ta = –40°C to +75°C.

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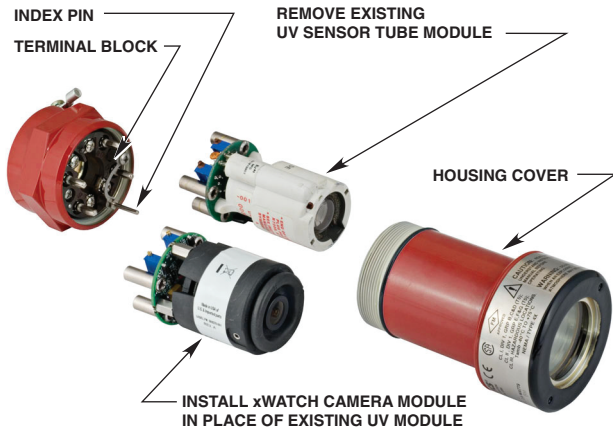IECEx FMG 07.0019
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Ta = –40°C to +75°C.

Dimensions

1/2 INCH NPT OR 20 MM

4.75 (12.06)

2.5 (6.35)

A2330

xWatch Dimensions in Inches (Centimeters)

B2338

System Block Diagram

INDEX PIN
TERMINAL BLOCK
REMOVE EXISTING UV SENSOR TUBE MODULE
HOUSING COVER
INSTALL xWATCH CAMERA MODULE IN PLACE OF EXISTING UV MODULE

B2331

NOTE: REQUIRES REWIRING TO VIDEO EQUIPMENT.

Converting C7050 to xWatch

DET-TRONICS®