

D101-(X)-P3807-BD

Explosion Camera Proof Network Camera





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SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY

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Patent Notice:

Manufactured under United States US Patent 9917428

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DESCRIPTION



The "D" Series includes a full range of Stainless Steel or Anodized Aluminum camera stations specifically designed for Hazardous Area Applications.

Spectrum's D Series is the first Class I Division 1 rated dome style explosion proof housings, and utilizes the most robust and advanced camera technologies available. The D Series was designed with the integrator in mind and offers features never before seen in current camera systems. The solution is Patented with features including a uniform constructed enclosure consisting of an integrated junction box milled directly to the camera housing. This eliminates the need for extra equipment, reduces installation time, reduces labor expenses, and increases safety by lessening the potential for mismatched hazardous rated components. Additionally, the D Series are constructed with a proprietary explosion resistant polymer blend offering maximum clarity and enhance optical performance. To enhance optical performance, the explosion proof lens is equipped with our Virtual Wiper Nano Technology. The series are available in anodized aluminum or 316L Stainless steel ensuring protection against rain, dust and corrosion within a wide temperature range between --20°C to 55°C. This feature ensures operation under extreme weather conditions and hazardous environments. It is suitable for monitoring wide open indoor/outdoor spaces such as refineries, wellheads, pipelines, offshore installations, remote and harsh locations where high-level reliability and precision are always required.

Option A- Model Matrix- D100-D500*



D(N)(XX)-(1)-(CCCCC)-BD

- N=(1) HOUSING LENGTH=3.32 in
- N=(2) HOUSING LENGTH=7.75 in
- N=(3) HOUSING LENGTH=4.5 in
- N=(4) HOUSING LENGTH=5 in
- N=(5) HOUSING LENGTH= 5.5 in
- XX= 01-99 IEC/EN/UL 60950-1, IEC/EN/UL 62368-1, IEC/EN/UL 60950-22 Internal Equipment Manufacturer Code**
- 1= (A) Aluminum Housing with SS 316L Dome Ring
- 1= (S) Stainless Steel 316L Housing
- C= Internal Equipment Part Number from Manufacturer***
- BD= Optional Breather drain model****
- *Internal components and D Series must be approved by Spectrum
- **Internal Equipment Manufacturer Code below
- ***Must be approved and verified by Spectrum
- **** Models supplied with Breather Drains will have IP66 ingress protection level

CODE "XX"	Manufacture
01	AXIS COMMUNICATIONS



BREATHER DRAIN MODEL





8935 ALMEDA GENOA RD. **HOUSTON, TEXAS 77075**

CERT NO. FM17US0156X

INPUT: 44-57 Vdc 60W

MODEL NUMBER: D201-S-Q6055-E-BD

SERIAL: TIME-MO-DY-YEAR

Class I Division 1 Groups B,C,D T6, Type 4X, IP66 Class II/III, Division 1, Groups E,F,G T6

Ta = -20°C to +55°C

-WARNINGS:

-NOT INCLUDING KETONE OR ESTER ATMOSPHERES

-CONDUIT ENTRIES ARE M20 X 1.5

-DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

-INSTALL SEAL AT ENCLOSURE ENTRY

US Patent 9917428

BREATHER DRAIN MODEL









SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY

8935 ALMEDA GENOA RD. HOUSTON, TEXAS 77075 USA

MODEL: D101-A-P3807-PVE-BD INPUT: 44-57 Vdc 12.9W MAX

SERIAL: TIME-MO-DY-YEAR

Class I, Zone 1, AEx/Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, Type 4X, IP66 Zone 21, AEx/Ex tb IIIC T85°C Db Ta = -20°C to +55°C, Type 4X, IP66



II 2 G Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, IP66 II 2 D Ex tb IIIC T85°C Db Ta = -20°C to +55°C, IP66 CERT NO. FM18ATEX0057X & IECEx FMG 18.0020X





WARNING:DO NOT OPEN WHEN ENERGIZED OR WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT INSTALL SEAL AT ENCLOSURE ENTRY

www.spectrumcamera.com

US Patent 9917428

AVERTISSEMENTS:

-NE PAS OUVRIR SOUS TENSION

-NE PAS OUVRIR SI UNE ATMOSPHERE EXPLOSIVE PEUT ÊNTRE PRESENTE

-POTENTIEL DÉCHARGE ÉLECTROSTATIQUE: VOIR INSTRUCTION

PRESS ÉTOUP, CÂBLE OU RACCORDEMENT AU CONDUIT DOIT AVOIR AU MOINS UNE TEMPÉRATURE AMBIANTE DE - 20 À 70 DEGRÉS CELSIUS

-SEAL A L'ENTREE



-DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

-POTENTIAL ELECTROSTATIC DISCHARGE: SEE INSTRUCTION

-SEAL AT ENTRY

-CABLE GLAND, CABLE AND/OR WIRING IN CONDUIT WHICH WILL BE USED IS REQUIRED TO BE RATED TO AT LEAST +70°C

STANDARDS & CERTIFICATIONS



STANDARDS-

The equipment is manufactured in accordance with the IECEX scheme, the ATEX Directive 2014/34/EU and with the following standards:

IEC 60079-0:2011

IEC 60079-1:2014

IEC 60079-31:2013

IEC 60529:2013

EN 60079-0:2012 + A11:2013

EN 60079-1:2014

EN 60079-31:2014

EN 60529:1991 + A1:2000 + A2:2013

ANSI/ISA 60079-0:2013

ANSI/UL 60079-1:2015

ANSI/ISA 60079-31:2015

ANSI/IEC 60529:2004

CAN/CSA-C22.2 No. 60079-0:2015

CAN/CSA-C22.2 No. 60079-1:2016

CAN/CSA-C22.2 No. 60079-31:2015

CAN/CSA-C22.2 No. 60529:2016

Specific Conditions of Use:

- -The flameproof joints of the equipment are not intended to be repaired. Consult the manufacturer if dimensional information on the flameproof joints is necessary.
- -Follow the manufacturer's instructions to reduce the potential of an electrostatic charging hazard on the surface of the equipment in Group II and III environments.
- -The equipment meets the requirements according to the low level risk of mechanical danger. Therefore, the equipment shall be located and installed such that the risk of impact or other mechanical damage is reduced or avoided.



NOTE: Use a clean cloth dampened with pure water for cleaning.

CERTIFICATIONS-

CERT NO. FM17US0156X & FM18CA0103X

Class I Division 1 Groups B,C,D T6, Ta = -20°C to +55°CType 4X, IP66/67

Class II/III, Division 1, Groups E,F,G T6 Type 4X, IP66/67 Ta = -20°C to +55°C

Class I, Zone 1, AEx/Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, Type 4X, IP66/67

Zone 21, AEx/Ex tb IIIC T85°C Db Ta = -20°C to +55°C, Type 4X, IP66/67

CERT NO. FM18ATEX0057X & IECEx FMG 18.0020X

II 2 G Ex db IIB+H2 T6 Gb Ta = -20° C to $+55^{\circ}$ C, IP66/67

II 2 D Ex tb IIIC T85°C Db Ta = -20°C to +55°C, IP66/67

DOCUMENT SYMBOLS



The following symbols are used throughout this manual to alert users to potential hazards or important information. *Failure to heed the warnings and cautions listed herein can lead to injury and equipment damage.*

Symbol	Label	Description
	WARNING:	Consists of conditions, practices, or procedures that must be observed to prevent personal injury and/or equipment damage.
4	CAUTION:	Risk of electric shock or high temperature parts may result in injury if proper precautions are not taken.
	NOTE:	Emphasizes important or essential information.

Locating Information:



NOTE: In the interest of completeness, manuals and drawings included with the system may provide information pertaining to options not included with your equipment. Information in application notes supersedes general information in these documents. Information can be located in this manual using any of the following aids.



General Manual:

This manual is intended to be used <u>in conjunction</u> with installed equipment manual from internal equipment manufacturer.



Note: In the event of a conflict between the requirements of this general installation manual and the internal equipment manual, the safety and installation procedures described in this manual shall take precedence.

Safety Considerations:

This information that must be read and understood by all persons installing, using, or maintaining this equipment. This manual is designed to aid personnel in the correct and safe installation, operation, and maintenance of the systems described. Personnel must consider all actions and procedures for potential hazards or conditions that may not have been anticipated in the written procedures. If a procedure cannot be performed safely, it must not be performed until appropriate actions can be taken to ensure the safety of equipment and personnel. The procedures in this manual are not designed to replace or supersede required or common sense safety practices. All safety warnings listed in any documents applicable to equipment and parts used in or with the system described in this manual must be read and heeded before commencing work on any part of the system.



NOTE: Refer to all ATEX, CSA, IECEx, NEC, NFPA and FM certificates for any Special Conditions of Use. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule of the certificate.



NOTE: Review all material and safety information in this manual and install in accordance with this document and all other applicable ATEX, CSA, IECEx, NEC, NFPA70 Installation Methods and FM and National standards.



Warning- Failure to follow appropriate safety procedures or appropriate use of the equipment described in this manual can lead to injury of personnel or equipment damage.



WARNING – EXPLOSION HAZARD – Do not open equipment unless power has been removed or the area is known to be non-hazardous.

General Safety and Operating Information:



General safety and operating information applicable to electrical equipment installed within hazardous locations. This information must be understood by all persons installing, using, or maintaining the electrical equipment. This information is designed to aid personnel in safe installation, operation, and maintenance of the "D" Series equipment. It is not designed to replace or limit appropriate safety measures applicable to work performed by personnel. Any additional safety and operating measures that are required must be determined by and followed by personnel performing work on the electrical equipment.



WARNING: Deviation from the specified instructions or procedure steps can result in injury to personnel, equipment malfunction or equipment damage.



WARNING: Return unit to factory for any repairs or replacement of parts, customer not permitted to repair. This will void all warranties and hazardous area certification(s) if non-authorized repair occurs.

General Precautions:

Slip resistant gloves and protective eyewear (glasses with side shields or goggles as appropriate) should be worn when installing and servicing any part of electrical equipment. Hot components should be allowed to cool before servicing if possible. Other appropriate equipment or clothing must be used as required by the type of work performed. All applicable regulations and procedures must be followed for the work performed. Before beginning any work on the equipment, carefully consider all the potential hazards and ensure that appropriate measures are taken to prevent injury to personnel or equipment damage.



CAUTION: Electrical equipment components may be hot even when power is not applied. Take appropriate precautions to prevent injury from contact with hot items.



WARNING:

The main housing is manufactured in a controlled environment that eliminates moister at the factory and is only to be opened by factory certified technicians at an authorized repair facility. Opening of the main housing will void all warranties.

NEVER open the main housing of the "D" Series unless authorized and trained and certified to do so



CAUTION: Failure to allow adequate cooling of electrical equipment components with hot surfaces before opening the enclosure can lead to injury of personnel or equipment damage.

General Safety and Operating Information:



Electrical Power:

The "D" Series IP cameras operate from a variety of power options including IEEE compliant POE devices.

 The power supply used with this product shall fulfill the requirements for Safety Extra Low Voltage (SELV) and Limited Power Source (LPS) according to IEC/EN/UL 62368-1 or IEC/EN/UL 60950-1 or Listed Class II Power Source Equipment. The product shall be grounded either through a shielded network cable (STP) or other appropriate method.

Camera Location:

The "D" Series IP camera must be installed in a suitable location away from impacts, heavy vibration and extreme heat. The "D" Series camera must not be installed in an area classification for which it is not rated. The "D" Series camera must be attached securely and appropriately to a wall or supporting structure.



CAUTION: The electrical cover should never be removed unless power is removed (for at least 5 minutes) from the unit or the area is known not to contain explosive materials.



- The product shall be installed by a trained professional.
- The product shall be used in compliance with local laws and regulations.
- Store the product in a dry and ventilated environment.
- Avoid exposing the product to shocks or heavy pressure.
- Do not install the product on unstable brackets, surfaces or walls.
- Use only applicable tools when installing the product. Using excessive force with power tools could cause damage to the product.
- Do not use chemicals, caustic agents, or aerosol cleaners.
- Use a clean cloth dampened with pure water for cleaning.
- Use only accessories that comply with the technical specification of the product. These can be provided by Spectrum or a third party.

General Safety and Operating Information:



Installation:

The installation must be realized in accordance with IEC/EN 60079-14 and/or in accordance with the national requirements. This equipment must be installed and used only by qualified personnel, having knowledge concerning electrical equipment for use in potentially explosive areas containing gas and/or dust. Qualified personnel must have knowledge regarding the types of explosion protection. This equipment is intended to be used in zone 1, 2, 21 and 22 for groups IIB+H2 and IIIC with temperature class T6 or T85°C, it is necessary to verify if this equipment is in accordance with the atmosphere where it is installed.

Connections:

Electric parameters power control unit Maximum supply voltage: POE+ IEEE 802.3at/af The terminals are suitable to receive: Solid wires Stranded wires.- *See wiring Diagram Page

Cable Glands:

The cable entry must be made in order not to alter the specific properties of terminal housing compartment. The connection to the external circuits must be realized by cable glands or pipe fittings covered by a separate certificate(s). If a cable gland is not used, or an entry is open, the entry must be closed by a stopping plug covered by a separate certificate. The diameter of the cable gland is cylindrical ISO M20 x 1.5.

This equipment can be used with different voltage and power, the nominal parameters are specified in the manual.

Cable: cable must be tested and certified for temperatures of 70°C or higher.

Fiber Cable: Use a suitably certified optical fiber cable and internal connections shall comply with requirements of IEC/EN 60079-15

Equipment Modifications:

This equipment must be installed and used in strict accordance with the instructions given in the user documentation. This equipment contains no user-serviceable components. Unauthorized equipment changes or modifications will invalidate all applicable regulatory certifications and approvals.



CERTIFICATIONS of Model- D101-(X)-P3807-PVE-BD

CERT NO. FM17US0156 & FM18CA0103X Class I Division 1 Groups B,C,D T6, Ta = -20° C to $+55^{\circ}$ C Type 4X, IP66 Class II/III, Division 1, Groups E,F,G T6 Type 4X, IP66/67 Ta = -20° C to $+55^{\circ}$ C Class I, Zone 1, AEx/Ex db IIB+H2 T6 Gb Ta = -20° C to $+55^{\circ}$ C, Type 4X, IP66 Zone 21, AEx/Ex tb IIIC T85°C Db Ta = -20° C to $+55^{\circ}$ C, Type 4X, IP66 CERT NO. FM18ATEX0057X & IECEx FMG 18.0020X II 2 G Ex db IIB+H2 T6 Gb Ta = -20° C to $+55^{\circ}$ C, IP66

II 2 D Ex tb IIIC T85°C Db Ta = -20°C to +55°C, IP66

ELECTRICAL REQUIREMENTS of Model- D101-(X)-P3807-PVE-BD

POWER INPUT/CONSUMPTION	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 Typical 6.1 W, max 11.4 W
Voltage	44-57 Vdc 12.9W

Environmental Conditions (Equipment must be powered)

OPERATIONONAL CONDITIONS

USE For Indoor and Outdoor Use

SPECIFICATIONS



D101-(X)-P3807-PVE-BD Series Casing Material Specifications			
-S-316L STAINLESS STEEL	47lbs		
-A- ANODIZED ALUMINUM	19lbs		



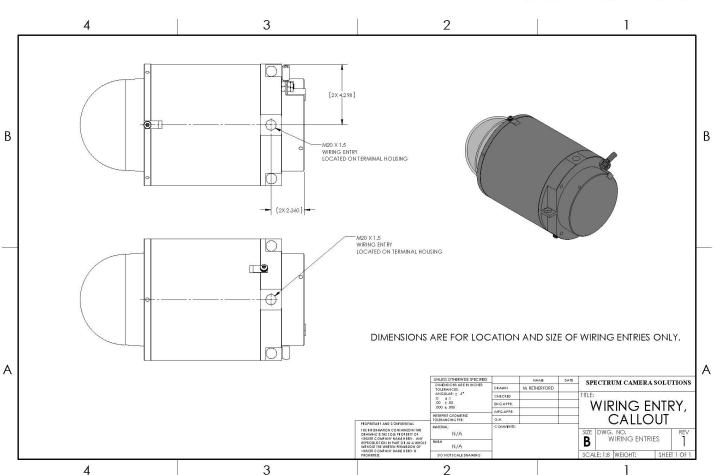
NOTE: Spectrum Camera Solutions, LLC is NOT responsible for any misuse or improper installation of product, assumes no liability for special or consequential damages caused by use or misuse or improper installation of its products sold and assumes no liability for injury from use or misuse or improper installation of its products or attached products.

D101-(X)-P3807-PVE-BD Explosion Proof Camera Hazardous Area				
Voltage	Model Number			
IEEE 802.3af/at Type 2 Class 4	316L STAINLESS STEEL or	D101-X-P3807-PVE-BD		
PoE Midspans/PoE Injectors	ANODIZED ALUMINUM			

Р	Power Source Specification For D101-(X)-P3807-PVE-		
В	BD		
	Reference Axis Manual		

WIRING ENTRIES





Conduit Entries are M20 x 1.5 Use appropriate Adapter With Nylon Washer or O-ring to keep ingress protection



CAUTION: Ensure the Ethernet cable is disconnected from power source prior to wiring to the terminal block



Ensure that power is off before attempting to connect and wire the camera

1. Use supplied M6 Hex tool to unscrew bolts and lock washers supplied on camera

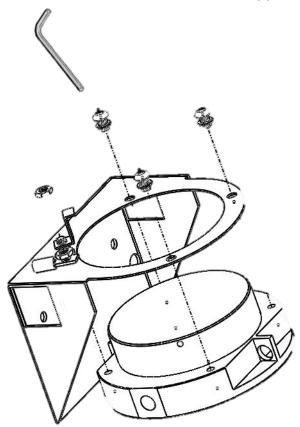


Figure 1. wall bracket installation

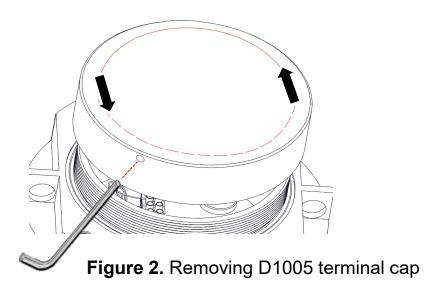
- 2. Make sure threads on camera and M10x 1.5 are free of dirt and debris. Place mount on camera and align holes and tighten bolts
- 3. Attach the camera with wall mount to mounting surface. Use only installation methods and materials capable of supporting four times the maximum specified load of the system



CAUTION: Ensure the Ethernet cable is disconnected from power source prior to wiring to the terminal block



4. Use supplied M5 supplied Hex tool to loosen D1005 terminal cap by turning counterclockwise

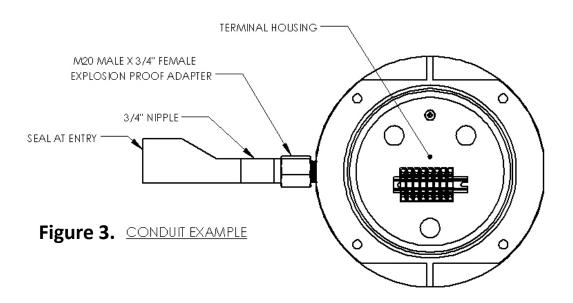


- 5. Set D1005 terminal cap in safe place
- 6. Route cable(s) into D1006 terminal housing junction box through user-supplied cable gland and seal using the recommended gland installation practices. There are two conduit entries on models without the-BD Breather drain option.



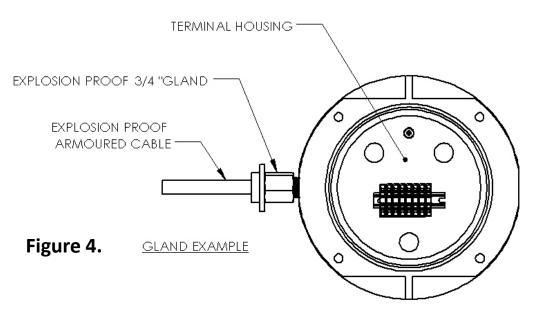
Conduit Entries are M20 x 1.5 Use appropriate Adapter with <u>Nylon Washer</u> or <u>O-ring</u> to keep ingress protection follow guidelines of the manufacturer of gland or adapter







Conduit Entries are M20 \times 1.5 Use appropriate Adapter With Nylon Washer or O-ring to keep ingress protection





CAUTION: Ensure the Ethernet cable is disconnected from power source prior to wiring to the terminal block



7. Connect the wiring using installer supplied small screw driver to push the open terminal block contact. Insert wires and remove screw driver. Adhere to local electrical codes/laws.

Table 1.

Power Connection To "D" Series Camera			
TERMINAL NUMBER	WIRE		
Position - 1	White-Orange		
Position - 2	Orange		
Position - 3	White-Green		
Position - 4	Blue		
Position - 5	White-Blue		
Position - 6	Green		
Position - 7	White-Brown		
Position - 8	Brown		

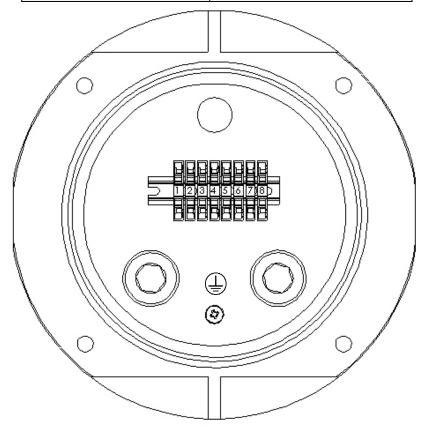


Figure 5. Wire/Cable Connections



8. In addition to the internal ground connection, this equipment is also provided by an external secondary ground connection. Both must be connected for the internal ground the section must be equal to the active conductors. The external ground can receive a wire of 4 mm. The user/installer must connect the internal and external earthing before powering. STP cable connection with earthing in camera junction box. The earth wire is the screen of the cable, to be isolated in the wiring terminal junction box size Green Thread-forming Bonding Screw, M5 x 15mm

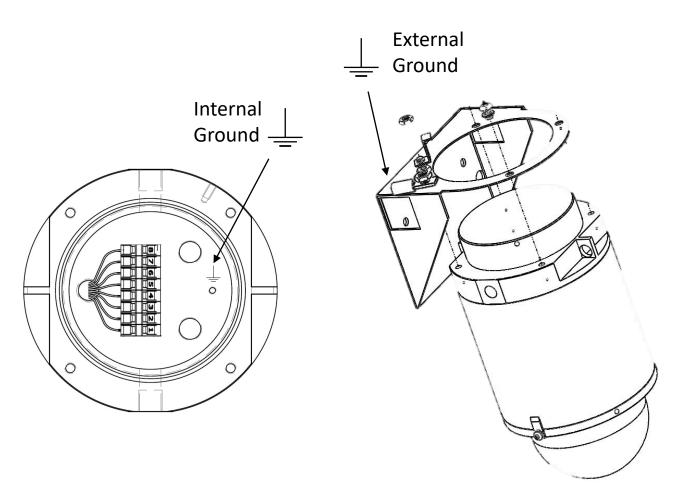


Figure 6. Grounding



- 9. Ensure threads on D1005 terminal cap and D1006 Terminal housing are free of dirt and debris.
- 10. Ensure gasket is free of dirt and debris

11. Reinstall D1005 terminal cap using supplied M5 supplied Hex tool to tighten by turning

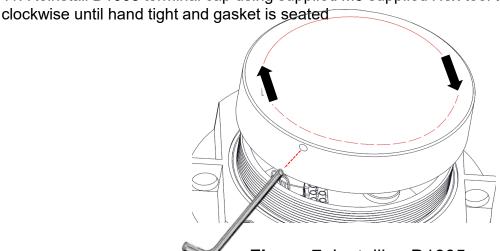


Figure 7. Installing D1005 cap

12. In the following order install D2005 housing retainer clip, wedge lock washers, and nut. Ground lug is at bottom of thread adapter See figure 8-9

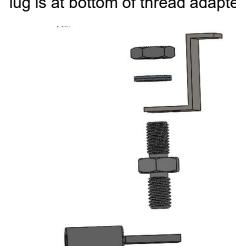


Figure 8. Retaining clip order

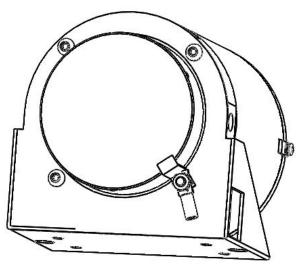


Figure 9. Final assembly



- 13. Remove Protective film after installation. If protective film is not removed in timely manor damage to dome is likely to occur with UV exposure
- 14. Apply power. For internal equipment startup procedures, setting changes, and troubleshooting guides reference the camera manufacturer's manual included with the "D" Series Cameras. If the included copy is lost please contact support@spectrumcamera.com



NOTE: Do not install camera unless power is applied in near future.



Dimensional General Assembly:

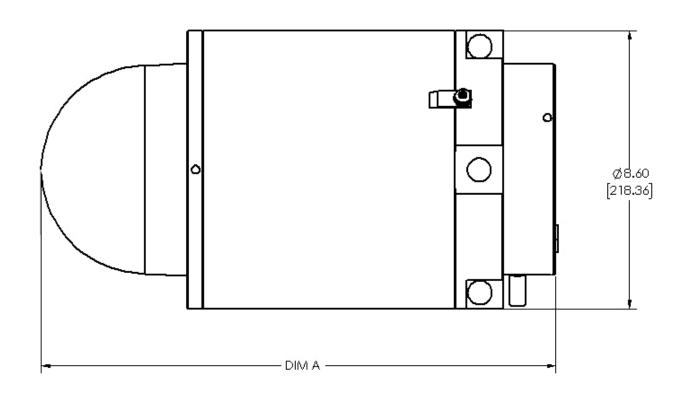


SPECIFICATION TABLE:

MODEL NUMBER	DIM A (mm)	HOUSING LENGTH (mm)	OPTION 'A' VARIABLE: N
D100	11.5 (292)	3.32 (84)	1
D200	15.9 (404)	7.75 (196)	2
D300	12.7 (323)	4.50 (114)	3
D400	13.2(335)	5.00 (127	4
D500	13.7 (348)	5.50 (140)	5

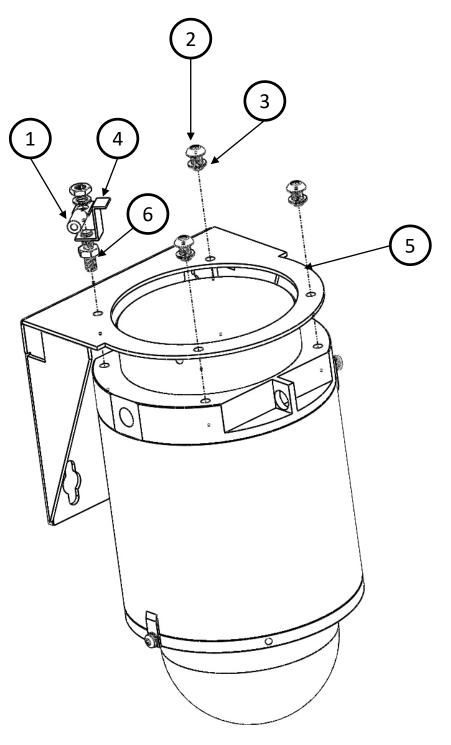
SPECIFICATION TABLE:

MODEL NUMBER	DIM A, mm	HOUSING LENGTH, mm	OPTION 'B' VARIABLE:
D084	292	84	084
D196	404	196	196
DMMM	208 + MMM	MMM	MMM



HARDWARE BOM





- 1- (QTY 1)EXTERNAL GROUND LUG
- 2- (QTY 3)M10 X 1.5 18-8 BOLT
- 3- (4 SETS) WEDGE LOCK WASHER
- 4- (QTY 1)D2005 Z-CLIP
- 5- SD-WM (WALL MNT. NOT INCLUDED)
- 6- M10X1.25 M10X1.5 ADAPTER

DISMANTLING & MAINTENANCE



Dismantling:

It is not recommended to open the main camera housing. All repairs of explosion-proof equipment must be made according the specified criteria of IEC/EN 60079-19 rule by qualified personnel, having knowledge concerning electrical equipment for potentially explosive areas containing gas and/or dust. Qualified personnel must have knowledge regarding the types of explosion protection.

Maintenance:

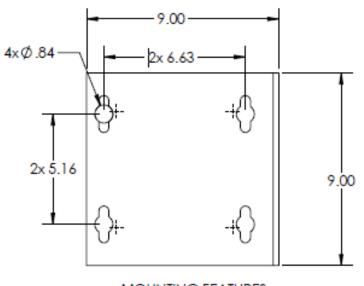
The maintenance must be realized in accordance with IEC/EN 60079-17 and/or in accordance with the national requirements. Contact Spectrum Camera for training program to properly open and close the main camera housing.

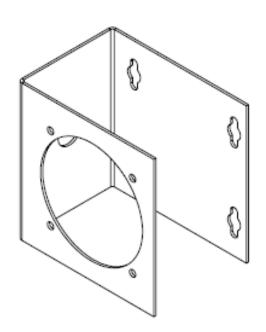
<u>Cleaning lens-</u> Washdown dome with water first to avoid partials scratching the surface. Clean lens with damp microfiber cloth with mild dish soap and water. Lastly, apply coating of Repel (by Unelko corporation) surface cleaner. Never use harsh chemicals or abrasive towels.

Replacing the battery—The Axis P3807-PVE product uses a *Panasonic 3.0 V BR2032 lithium battery Lithium primary battery composed of cathode from carbon monofluoride anode from lithium and electrolyte from organic solvent and lithium salt as the power supply for its internal real-time clock (RTC). Under normal conditions this battery will last for a minimum of five years. Low battery power affects the operation of the RTC, causing it to reset at every power-up. When the battery needs replacing, a log message will appear in the product's server report. For more information about the server report, see the product's setup pages or contact Spectrum support. The battery should not be replaced unless required, but if the battery does need replacing, contact Spectrum support at support@spectrumcamera.com. This battery is not field replaceable*.

SD-HM HORIZONTAL MOUNT



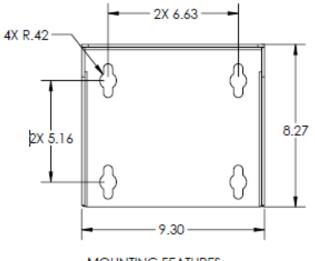


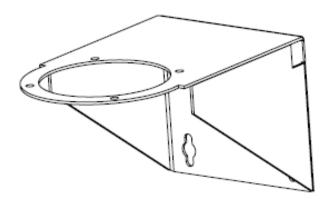


MOUNTING FEATURES: WEIGHT: 7.03 LBS (3.19kg)

SD-WM EXT WALL MOUNT







MOUNTING FEATURES: WEIGHT: 10.16 LBS(4.61kg)

SD-PMA POLE MOUNT ADAPTER



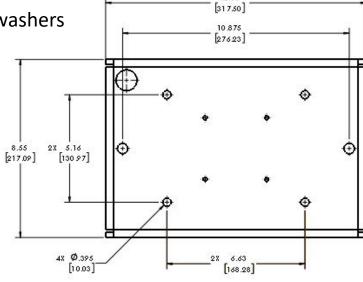
12.50

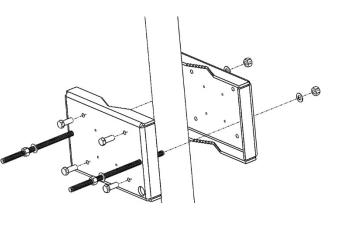
HARDWARE

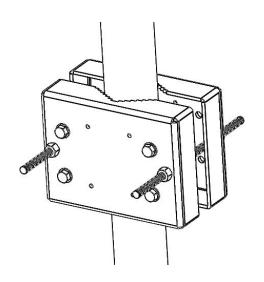
QTY 4 7/8-20 18-8 Bolts

QTY 2 12in all thread with nuts and washers

QTY 2 A1612 sides



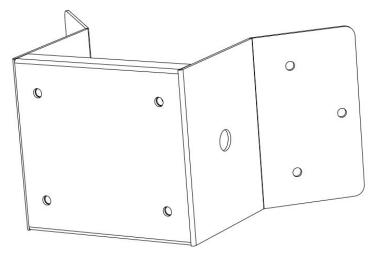


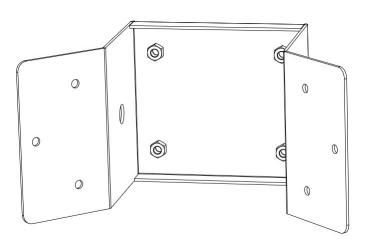


SD-CM CORNER MOUNT



HARDWARE-QTY 4 7/8-20 18-8 Bolts

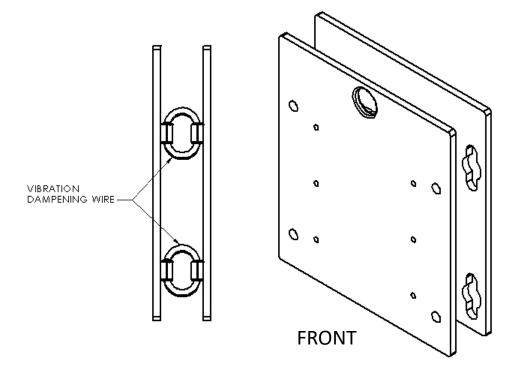


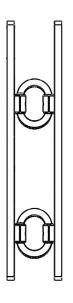


SD-VM VIBRATION MOUNT



HARDWARE-QTY 4 7/8-20 18-8 Bolts

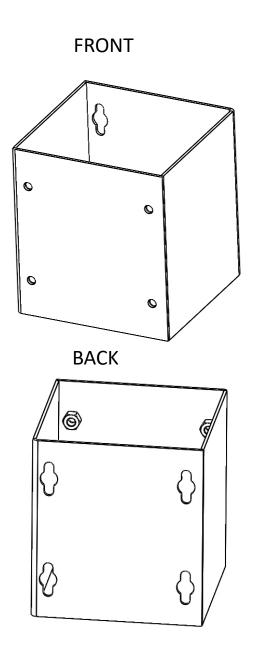




SD-SO STANDOFF MOUNT

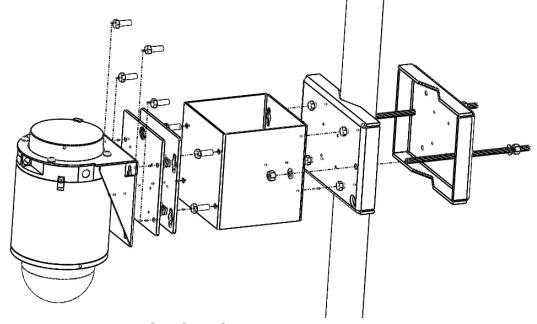


HARDWARE-QTY 4 7/8-20 18-8 Bolts

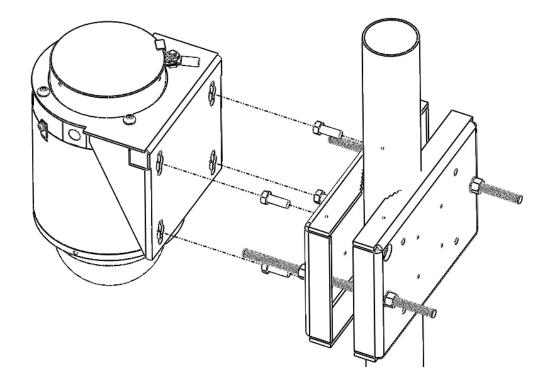




SD-CM+SD-VM+SD-SO+ SD-PMA



SD-CM+SD-PMA



Doc No. 100108292018 2014/34/EU

Notified Body

Ratings

EU Declaration of Conformity Spectrum Camera Solutions, II C

Spectrum Camera Solutions declares that under our sole responsibility that the product (s) listed below conform to the relevant provisions of 2014/34/EU of August 29, 2018

FM Approvals Ltd. 1 Windsor Dials,

Windsor, Berkshire, UK. SL4 1RS

Product(s) Network Ethernet Cameras

Model numbers **D** Series

Dab-c-d-e. Network Ethernet Camera.

a = Housing length 1, 2, 3, 4 or 5 (or any three digits from 084 to 196 representing custom housing

lengths in mm).

b = Camera manufacturer code (two digits) 01 to 99.

c = Material A or S.

d = Several characters representing the camera manufacturer's part number (may contain additional

e = Optional breather/drain BLANK or BD. (IP67 is not applicable when supplied with optional

The D Series Network Ethernet Cameras can be supplied with a variety of cameras (in accordance

of at least 40% of each cross-sectional area remains free to permit unimpeded gas flow and, therefore,

breather/drain).

II 2 G Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C Markings

II 2 D Ex tb IIIC T85°C Db Ta = -20°C to +55°C

with EN 60950 or EN 62368) complying with the IEEE 802.3af, 802.3at, 802.3at++ or 802.3bt PoE (Power over Ethernet) standard (57Vdc max). Voltage and wattage shall not exceed the maximum tested configuration of 57Vdc (60W). The D Series Network Ethernet Cameras are rated for use in an ambient temperature range of -20°C to +55°C and are IP66/67 (IP67 is not applicable when supplied with optional breather/drain). The camera within the enclosure may be placed in any arrangement provided that an area

EN 60079-0:2012 + A11:2013, EN 60079-1:2014, EN 60079-31:2014,

unrestricted development of an explosion. Separate relief areas may be aggregated provided each area has

EN 60529:1991 + A1:2000 + A2:2013

a minimum dimension in any direction of 12.5mm.

Compliance with the Essential **Health and Safety Requirements** has been assessed by reference to

the following Standards

8935 Almeda Genoa Rd. Building B Houston Texas 77075

Factory/Manufacturing Location

Conformity has been

demonstrated with reference to the following documentation:

EU Type Examination Certificate (FM18ATEX0057X - 0)

FM19ATEXQ0130 Quality Assurance Notification

Hubert Lee Rice II

Date: August 29, 2018

Doc No. 100108292018 2014/34/EU Spectrum Camera Solutions, LLC 8935 Almeda Genoa Rd. Houston, TX

Doc No. 100108292018 2014/34/EU

Attestation of Conformity Spectrum Camera Solutions, II C

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