NOTES: UNLESS OTHERWISE SPECIFIED

1. CLEARANCE REQUIRED FOR FREE MOTION OF SYSTEM.

2. O-RING USED FOR SEALING SYSTEM TO MOUNTING STRUCTURE. STANDALONE UNIT MEETS IP69K SEALING SPECIFICATION. MINIMUM MOUNTING SURFACE FLATNESS OF 0.956mm (0.0378") OVER SYSTEM DIAMETER REQUIRED FOR CORRECT USE. WHEN MOUNTING TO IRREGULAR SURFACES, USE OF BEDDING COMPOUND RECOMMENDED.

3. USE WITH FUR MOUNTING HARDWARE KITS

4. USE LOCITITE 262 WITH ALL METAL TO METAL THREADED CONNECTIONS THAT DO NOT HAVE LOCKING PATCHES.

WARNING

DO NOT BOTTOM FASTENERS IN BASE.

BOLT LENGTH NOT TO EXCEED 6MM INTO BASE.

ELECTRONICS WILL BE DAMAGED BY BASE PENETRATION - VOIDING WARRANTY.

BOLT TORQUE NOT TO EXCEED 4.5N-m (3.3 lb-ft).

NON-STANDARD PAINT NOTICE: FOR CUSTOMERS WHO CONSIDER SECONDARY PAINTING OF THE CAMERA ASSEMBLY BE AWARE OF THE FOLLOWING CONCERNS:

A. SECONDARY PAINT AIDS THE CAMERA WARRANTY AT RISK. SINCE THE CAMERA PAINT IS PART OF THE CAMERA DESIGN, A CHANGE IN PAINT IS A CHANGE IN CAMERA DESIGN WHICH MAY AFFECT PERFORMANCE AND RELIABILITY.

B. PAINT COLOUR CAN SIGNIFICANTLY AFFECT CAMERA INTERNAL TEMPERATURE. BLACK PAINT IS OFTEN USED TO RESTORE STANDARDS AND CAN GENERALLY ABSORB HEAT TO A GREATER EXTENT COMPARED TO LIGHT COLOURS. INTERNAL CAMERA TEMPERATURES AFFECT PERFORMANCE AND RELIABILITY.

C. FOR THOSE WHO STILL CHOOSE TO PAINT THE CAMERA, INSURE SECONDARY PAINT DOES NOT BLOCK AIRFLOW AROUND THE FLIR LOGO. THERE ARE MOISTURE BARRIER, PRESSURE RELIEF VALVES UNDER THE LOWER FLIR ICONS WHICH SHOULD MAINTAIN AIRFLOW PATHWAYS FOR PROPER FUNCTION.

ANY FURTHER CONCERNS IN THIS REGARD CONTACT FLIR TECHNICAL SUPPORT.
IMPORTANT NOTE:
PAPER SIZE: 22x34in
TEMPLATE SHOULD PRINT 1:1
DUE TO VARIATION IN SOFTWARE AND PRINTERS, PLEASE VERIFY SCALE BELOW BEFORE MODIFYING MOUNTING SURFACE.
ENSURE PRINTER MARGINS ARE SET TO ZERO AND SCALE IS 100%.

DECK PORT CABLE CLEARANCE
- 0.57 [2.28] MIN
- 0.70 [2.79] MAX

RIGHT ANGLE CABLES NOT RECOMMENDED FOR MOUNTING SURFACES >10mm THICK.
IF MOUNTING SURFACE IS >10mm THICK, USE STRAIGHT CABLES OR MOUNT TO TOP DOWN RISER.

M500 BASE CUP BOLT CIRCLE

OWNS WORK®
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IMPORTANT NOTE:
PAPER SIZE: 22x34in
TEMPLATE SHOULD PRINT 1:1
DUE TO VARIATION IN SOFTWARE AND PRINTERS, PLEASE VERIFY SCALE BELOW BEFORE MODIFYING MOUNTING SURFACE.
ENSURE PRINTER MARGINS ARE SET TO ZERO AND SCALE IS 100%.

DECK PORT CABLE CLEARANCE
- 0.57 [2.28] MIN
- 0.70 [2.79] MAX

RIGHT ANGLE CABLES NOT RECOMMENDED FOR MOUNTING SURFACES >10mm THICK.
IF MOUNTING SURFACE IS >10mm THICK, USE STRAIGHT CABLES OR MOUNT TO TOP DOWN RISER.

M500 BASE CUP BOLT CIRCLE
WITH CABLE INSTALLED, TURN NUT 1/4 TURN BEYOND HAND TIGHT.

GLAND SEAL DESIGNED FOR USE WITH DOUBLE SHIELDED CAT 5 ETHERNET CABLE. USE OF SINGLE SHIELDED CABLE MAY REQUIRE THE USE OF ADDITIONAL SEALANT SUCH AS SILICON OR RTV TO ENSURE SEALING OF ENCLOSURE.

INSERT NETWORK CABLE RJ45 THROUGH GLAND NUT AND SEAL BEFORE INSTALLING.

IP66 RATED ABOVE GASKET. IP64 RATED BEHIND GASKET.

APPLY ADHESIVE SIDE OF GASKET TO JCU BODY.

MOUNTING PANEL THICKNESS RANGE 1.6-45 [0.036-1.750] WHEN MOUNTING TO PANEL LESS THAN 6.3 [0.25] REVERSE PADDLES.

DURING INITIAL TIGHTENING, ENSURE MOUNTING TABS ON SCREWS SWING FREE OF REAR HOUSING. WITH TABS RUN UP AGAINST REAR OF INSTRUMENT PANEL, TIGHTEN 1/4 - 1/2 TURN BEYOND HAND TIGHT.
TOP LEVEL ASSEMBLY
M500

CORNERS SHALL BE SHARP.

IMPORTANT NOTE:

PAPER SIZE: 11x17in
TEMPLATE SHOULD PRINT 1:1

DUE TO VARIATION IN SOFTWARE AND PRINTERS, PLEASE VERIFY SCALE BELOW BEFORE MODIFYING MOUNTING SURFACE.

ENSURE PRINTER MARGINS ARE SET TO ZERO AND SCALE IS 100%.

PIECE PART. REV
SHEET OF PRINTED: SCALE
CAGESIZE

METRIC

THIS DOCUMENT DOES NOT CONTAIN ANY EXPORT-CONTROLLED INFORMATION.
Note: Cable configurations shown are for short cables included with each unit. Long accessory cables are available where no in-line coupling is necessary. For more information, see Sheet 9.
POE INJECTOR POWER REQUIREMENT
+9-36VDC (12V/1.85A - 24V/0.90A)
(100M RUN LENGTH MAX WITHOUT BUFFER)

FLIR PN 500-0398-10

NETWORK CABLE FOR PoE DEVICES (IEEE802.3af)
8 CONDUCTOR T568B, ETHERNET, DOUBLE SHIELDED
FLIR PN 308-0163-25 OR EQUIVALENT
NOTE: TO MAINTAIN IEC 60945 EMI COMPLIANCE,
USE OF DOUBLE SHIELDED CABLE REQUIRED.

CONNECTOR
RJ45 WATERPROOF ENCLOSURE
FLIR PN 4115028

POWER CABLE
12AWG TINNED STRANDED WIRE
RED WIRE: +12-24 VDC (4.4-2.2 AMP NOM)
BLK WIRE: DC RETURN
DRAIN WIRE: EARTH GROUND
BUTT SPLICE OR INSTALLER SUPPLIED CONNECTOR
INSTALLER SUPPLIED POWER CABLE
GAUGE OF WIRE TO BE APPROPRIATE
FOR SUPPLY VOLTAGE AND LENGTH OF
CABLE RUN TO ENSURE ADEQUATE
CURRENT CARRYING CAPABILITY.

HD/SDI CABLE - RG6 BNC
ISOLATION TRANSFORMER
BNC FEMALE TO FEMALE
ANALOG VIDEO CABLE
RG-179 F-TYPE
INTEGRATOR SPECIFIC ENVIRONMENTAL EXPOSURE RATINGS APPLY

HDMI INTERFACE
PELCO INTERFACE
NMEA INTERFACE
NETWORK SWITCH, NON PoE
INSTALLER SUPPLIED

NOTE: CABLE CONFIGURATIONS SHOWN ARE FOR SHORT CABLES INCLUDED WITH EACH UNIT. LONG ACCESSORY CABLES ARE AVAILABLE WHERE NO IN-LINE COUPLING IS NECESSARY. FOR MORE INFORMATION, SEE SHEET 9.

INTERCONNECT DIAGRAM
MULTIPLE JCU - POE SWITCH
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THIS DOCUMENT DOES NOT CONTAIN ANY EXPORT-CONTROLLED INFORMATION.
POWER CABLE (RIGHT ANGLE SHOWN)

ANALOG VIDEO AND SERIAL CABLE (RIGHT ANGLE SHOWN)

ETHERNET CABLE (RIGHT ANGLE SHOWN)

F-TYPE CONNECTOR

PIN 1
PIN 2
PIN 3
PIN 4
PIN 5
PIN 6
PIN 7
PIN 8
PIN 9
PIN 10
PIN 11
PIN 12

RJ45 CONNECTOR (P2)
PINOUT IN ACCORDANCE WITH 802.3af STANDARD B

ETHERNET CABLE CONNECTOR PINOUT

IMPORTANT: CHASSIS GROUND WIRE TO BE TIED SECURELY TO THE NEGATIVE BATTERY TERMINAL

POWER CABLE PINOUT TABLE

WIRE COLOR | SIGNAL NAME | PIN NUMBER
--- | --- | ---
RED | BATT + | 1
BLACK | BATT - | 2
DRAIN | CHASSIS GROUND | 10

ETHERNET CABLE PINOUT TABLE

P1 | WIRE COLOR | NAME | P2
--- | --- | --- | ---
1 | ORANGE/WHITE | TXRX A+ | 1
2 | ORANGE | TXRX A- | 2
3 | BLUE | TXRX C+ | DC+ | 4
4 | BLUE/WHITE | TXRX C- | DC+ | 5
5 | GREEN/WHITE | TXRX B+ | 3
6 | GREEN | TXRX B- | 6
7 | BROWN/WHITE | TXRX D+ | DC- | 7
8 | BROWN | TXRX D- | DC- | 8
9 | NA | NA | NA
10 | DRAIN | DRAIN | SHELL

ANALOG VIDEO AND SERIAL CABLE PINOUT TABLE

WIRE COLOR | NAME | PIN NUMBER
--- | --- | ---
GREEN | NMEA TX-P | 1
GREEN/WHITE | NMEA TX-N | 2
RG179 | ANALOG VIDEO OUT | 3
NATURAL | ANALOG VIDEO RETURN | 4
BROWN/WHITE | PELCO RX-N | 5
BROWN | PELCO RX-P | 6
BLUE | PELCO TX-P | 7
ORANGE/WHITE | NMEA RX-N | 8
ORANGE | NMEA RX-P | 9
DRAIN | PELCO SHIELD | 10
DRAIN | NMEA SHIELD | 11
BLUE/WHITE | PELCO TX-N | 12

FLIR PART NUMBER | CABLE DESCRIPTION
--- | ---
308-0241-01-00 | CABLE - ETHERNET RA TO RJ45, 1M
308-0263-01-00 | POWER CABLE - RA, 12 AWG, 1M
308-0264-01-00 | CABLE - AV AND SERIAL RA, 1M
308-0267-00 | CABLE - HD/SDI 1M
308-0260-01-00 | CABLE - ETHERNET TO RJ45, 1M
308-0262-01-00 | POWER CABLE - 12 AWG, 1M
308-0266-01-00 | CABLE - AV AND SERIAL, 1M
308-0264-01-00 | CABLE - HD/SDI 100FT
308-0251-30-00 | CABLE - ETHERNET TO RJ45, 100FT, LSZH
308-0252-30-00 | POWER CABLE - 12 AWG, 100FT, LSZH
308-0254-30-00 | CABLE - POWER, 12 AWG, 100FT, LSZH
308-0265-01-00 | CABLE - AV AND SERIAL, 100FT, LSZH
308-0256-30-00 | CABLE - AV AND SERIAL RA, 100FT, LSZH
HIDDEN CABLE MOUNTING SCHEME:

Mounting directly through customer decking, or other surfaces.

Max deck thickness for right angled cables without top down riser: 10mm.

CABLE PORT
FOR DIMENSIONS SEE SHEETS 2 AND 3

SOCKET HEAD CAP SCREW WITH LOCKING PATCH
M6 X 1.0
LENGTH: 6mm + THICKNESS OF CUSTOMER DECKING
316 STAINLESS STEEL
6 PLACES
APPLY CORROSION INHIBITOR (USS TEF-GEL)
TORQUE TO 4.5 Nm (3.3 lb-ft)

M500 WEIGHT: <14 kg (31lb)

WARNING

5.

CUSTOMER DECKING, OR OTHER STRUCTURE.

MAX DECK THICKNESS FOR RIGHT ANGLED CABLES WITHOUT TOP DOWN RISER: 10mm

CABLE PORT
FOR DIMENSIONS SEE SHEETS 2 AND 3

SOCKET HEAD CAP SCREW WITH LOCKING PATCH
M6 X 1.0
LENGTH: 6mm + THICKNESS OF CUSTOMER DECKING
316 STAINLESS STEEL
6 PLACES
APPLY CORROSION INHIBITOR (USS TEF-GEL)
TORQUE TO 4.5 Nm (3.3 lb-ft)

M500 WEIGHT: <14 kg (31lb)

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CABLE PORT
FOR DIMENSIONS SEE SHEETS 2 AND 3

SOCKET HEAD CAP SCREW WITH LOCKING PATCH
M6 X 1.0
LENGTH: 6mm + THICKNESS OF CUSTOMER DECKING
316 STAINLESS STEEL
6 PLACES
APPLY CORROSION INHIBITOR (USS TEF-GEL)
TORQUE TO 4.5 Nm (3.3 lb-ft)

M500 WEIGHT: <14 kg (31lb)

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CABLE PORT
FOR DIMENSIONS SEE SHEETS 2 AND 3

SOCKET HEAD CAP SCREW WITH LOCKING PATCH
M6 X 1.0
LENGTH: 6mm + THICKNESS OF CUSTOMER DECKING
316 STAINLESS STEEL
6 PLACES
APPLY CORROSION INHIBITOR (USS TEF-GEL)
TORQUE TO 4.5 Nm (3.3 lb-ft)

M500 WEIGHT: <14 kg (31lb)

WARNING

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CUSTOMER DECKING, OR OTHER STRUCTURE.

MAX DECK THICKNESS FOR RIGHT ANGLED CABLES WITHOUT TOP DOWN RISER: 10mm

CABLE PORT
FOR DIMENSIONS SEE SHEETS 2 AND 3

SOCKET HEAD CAP SCREW WITH LOCKING PATCH
M6 X 1.0
LENGTH: 6mm + THICKNESS OF CUSTOMER DECKING
316 STAINLESS STEEL
6 PLACES
APPLY CORROSION INHIBITOR (USS TEF-GEL)
TORQUE TO 4.5 Nm (3.3 lb-ft)

M500 WEIGHT: <14 kg (31lb)

WARNING

5.

CUSTOMER DECKING, OR OTHER STRUCTURE.

MAX DECK THICKNESS FOR RIGHT ANGLED CABLES WITHOUT TOP DOWN RISER: 10mm

CABLE PORT
FOR DIMENSIONS SEE SHEETS 2 AND 3

SOCKET HEAD CAP SCREW WITH LOCKING PATCH
M6 X 1.0
LENGTH: 6mm + THICKNESS OF CUSTOMER DECKING
316 STAINLESS STEEL
6 PLACES
APPLY CORROSION INHIBITOR (USS TEF-GEL)
TORQUE TO 4.5 Nm (3.3 lb-ft)

M500 WEIGHT: <14 kg (31lb)

WARNING

5.

CUSTOMER DECKING, OR OTHER STRUCTURE.

MAX DECK THICKNESS FOR RIGHT ANGLED CABLES WITHOUT TOP DOWN RISER: 10mm

CABLE PORT
FOR DIMENSIONS SEE SHEETS 2 AND 3

SOCKET HEAD CAP SCREW WITH LOCKING PATCH
M6 X 1.0
LENGTH: 6mm + THICKNESS OF CUSTOMER DECKING
316 STAINLESS STEEL
6 PLACES
APPLY CORROSION INHIBITOR (USS TEF-GEL)
TORQUE TO 4.5 Nm (3.3 lb-ft)

M500 WEIGHT: <14 kg (31lb)

WARNING

5.

CUSTOMER DECKING, OR OTHER STRUCTURE.

MAX DECK THICKNESS FOR RIGHT ANGLED CABLES WITHOUT TOP DOWN RISER: 10mm

CABLE PORT
FOR DIMENSIONS SEE SHEETS 2 AND 3

SOCKET HEAD CAP SCREW WITH LOCKING PATCH
M6 X 1.0
LENGTH: 6mm + THICKNESS OF CUSTOMER DECKING
316 STAINLESS STEEL
6 PLACES
APPLY CORROSION INHIBITOR (USS TEF-GEL)
TORQUE TO 4.5 Nm (3.3 lb-ft)

M500 WEIGHT: <14 kg (31lb)

WARNING

5.
**CABLE PORT**

FOR DIMENSIONS SEE SHEETS 2 AND 3

**MOUNTING HOLES**

AS DETAILED ON PAGE 3

**WARNING**

5.

EXPOSED CABLE MOUNTING SCHEME:

CUSTOMER SUPPLIED MOUNTING BRACKET/SURFACE
BALL UP CONFIGURATION SHOWN

EXPOSED CABLE MOUNTING SCHEME:

CUSTOMER SUPPLIED MOUNTING BRACKET/SURFACE
BALL DOWN CONFIGURATION SHOWN

**FASTENERS BETWEEN TOP DOWN RISER AND MOUNTING SURFACE TO BE SUPPLIED BY THE INSTALLER:**

RECOMMENDED FASTENERS DETAILED ON PAGE 3.

**FASTENERS BETWEEN TOP DOWN RISER AND MOUNTING SURFACE TO BE SUPPLIED BY THE INSTALLER:**

RECOMMENDED FASTENERS DETAILED ON PAGE 3.

**WARNING**

5.

**GASKET, TOP DOWN RISER**

INCLUDED IN TOP DOWN RISER KIT

FLIR PN 4141973

**GASKET, TOP DOWN RISER**

INCLUDED IN TOP DOWN RISER KIT

FLIR PN 4141973

**MOUNTING HOLES**

AS DETAILED ON PAGE 3

**M500 WEIGHT:** <14 kg (31lb)

**M500 WEIGHT:** <14 kg (31lb)

**EXPOSED CABLE MOUNTING SCHEME:**

CUSTOMER SUPPLIED MOUNTING BRACKET/SURFACE
BALL UP CONFIGURATION SHOWN

CUSTOMER SUPPLIED MOUNTING BRACKET/SURFACE
BALL DOWN CONFIGURATION SHOWN

**WASHER**

M6

316 STAINLESS STEEL

**WASHER**

M6

316 STAINLESS STEEL

**AS568-436 EPDM O-RING**

[5.85in ID x .275in DIA]

[49mm ID x 7mm DIA]

**AS568-444 EPDM O-RING**

[7.72in ID x .275in DIA]

[96mm ID x 7mm DIA]

**SOCKET HEAD CAP SCREW WITH LOCKING PATCH**

M6 X 1.0

LENGTH: 16mm

316 STAINLESS STEEL

6 PLACES

APPLY CORROSION INHIBITOR (USS TEF-GEL)

TORQUE TO 4.5 N·m (3.3 lb·ft)

**SOCKET HEAD CAP SCREW WITH LOCKING PATCH**

M6 X 1.0

LENGTH: 16mm

316 STAINLESS STEEL

6 PLACES

APPLY CORROSION INHIBITOR (USS TEF-GEL)

TORQUE TO 4.5 N·m (3.3 lb·ft)

**AS568-436 EPDM O-RING**

[5.85in ID x .275in DIA]

[49mm ID x 7mm DIA]

**AS568-444 EPDM O-RING**

[7.72in ID x .275in DIA]

[96mm ID x 7mm DIA]

**WARNING**

5.

**TOP DOWN RISER**

FLIR PN 4141973

**TOP DOWN RISER**

FLIR PN 4141973

**CUSTOMER DECKING, OR OTHER STRUCTURE:**

MAX DECK THICKNESS FOR RIGHT ANGLED CABLES WITHOUT TOP DOWN RISER: 10mm

**CUSTOMER DECKING, OR OTHER STRUCTURE:**

MAX DECK THICKNESS FOR RIGHT ANGLED CABLES WITHOUT TOP DOWN RISER: 10mm

**FLIR PN 4141973**

HIGHLY RECOMMENDED FOR INSTALLATIONS ONTO METAL SURFACES

**FLIR PN 4141973**

HIGHLY RECOMMENDED FOR INSTALLATIONS ONTO METAL SURFACES

**MOUNTING HOLES**

AS DETAILED ON PAGE 3

**MOUNTING HOLES**

AS DETAILED ON PAGE 3

**M500 ICD**

METRIC

**M500 ICD**

METRIC

**M500 ICD**

METRIC

**M500 ICD**

METRIC

**M500 ICD**

METRIC
M500 WEIGHT: <14 kg (31lb)

FASTENERS BETWEEN DAMPING MOUNT AND MOUNTING SURFACE TO BE SUPPLIED BY THE INSTALLER.
RECOMMENDED FASTENERS DETAILED ON PAGE 3.

CABLE PORT FOR DIMENSIONS SEE SHEETS 2 AND 3

M500 DAMPING MOUNT FLIR PN 421-0070-00

FASTENERS BETWEEN DAMPING MOUNT AND MOUNTING SURFACE TO BE SUPPLIED BY THE INSTALLER. RECOMMENDED FASTENERS DETAILED ON PAGE 3.

SOCKET HEAD CAP SCREW WITH LOCKING PATCH
M6 X 1.0
LENGTH 25mm
316 STAINLESS STEEL
6 PLACES
APPLY CORROSION INHIBITOR (USS TEF-GEL)
TORQUE TO 4.5 N·m (3.3 lb-ft)

WARNING

M500 DAMPING MOUNT (PN 421-0070-00) DIMENSIONS MATCH THOSE OF TOP DOWN RISER (PN 421-0065-00) SEE PAGE 3 FOR DETAILS