



State of Rhode Island  
Department of Administration / Division of Purchases  
One Capitol Hill, Providence, Rhode Island 02908-5855  
Tel: (401) 574-8100 Fax: (401) 574-8387

**ADDENDUM # 2**

4/17/15

Solicitation RFQ #7549436

*Title: Parking Lot B Renovation – Rhode Island College*

**Submission Deadline: April 28, 2015 @ 10:00 AM**

Per the issuance of ADDENDUM #2 (39 pages) the following are noted:

See attached.

Prospective bidders and all concerned are hereby advised of the attached changes/modifications for the above referenced RFQ and are hereby requested to change their copies accordingly.

*Interested Parties should monitor this website on a regular basis, for any additional information that may be posted.*

**Gary P. Mosca,  
Senior Buyer**



April 16, 2015

Ref: 72548.00

Mr. Andrew Mayes  
College Engineering  
Rhode Island College  
Physical Plant  
600 Mt. Pleasant Avenue  
Providence, RI 02908-1991

Re: Parking Lot B Addendum 2

Dear Mr. Mayes:

VHB has prepared the attached information to be issued for addendum 2 on solicitation 7549436 for Parking Lot B. The addendum includes the following:

- Site plans dated April 15, 2015 issued for Addendum 2 with revisions including:
  - Adjustments to the landscaping surrounding the cooperative pre-school on sheet L-1 and L-2.
  - Elimination of the ornamental fence surrounding the cooperative pre-school. Spec section 32 31 19 is also eliminated with this revision.
  - Addition of the existing Whipple Hall sewer, completed under a separate project, to sheet C-6 and subsequent adjustment to intersection curbing on Cole Road adjacent to the Cooperative Pre-School shown on sheet C-2.
  - Sheet SE-1 and SE-2 have been revised and sheets SE-3 and SE-4, Camera and Blue Light LV Plan, have been added to include: connecting the blue phone system into the emergency generator at Building 1; adjustments to light pole base heights and mounting heights; and revisions to low voltage distribution, surge protection, pull box locations, conduits, and cameras.
- Revised Bid Form
- Revised Supplemental Conditions with August 15<sup>th</sup>, 2015 substantial completion date, clarification of construction fencing requirements, and clarification of east/west pedestrian routes to be provided throughout construction.
- RIDEM RIPDES Permit Approval.

Engineers | Scientists | Planners | Designers

10 Dorrance Street  
Suite 400  
Providence, Rhode Island 02903  
P 401.272.8100  
F 401.273.9694

RIC Parking Lot B  
Ref: Addendum 2  
April 16, 2015  
Page 2



- Cut sheets for camera and low voltage system equipment.

Please advise if you have any question or comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Jon Stabach".

Jon Stabach, PE, LEED AP

Project Manager  
jstabach@vhb.com

Solicitation #: 7549436

Solicitation Title: Rhode Island College – Parking Lot B Renovations

**BID FORM**

To: The State of Rhode Island Department of Administration  
Division of Purchases, 2<sup>nd</sup> Floor  
One Capitol Hill, Providence, RI 02908-5855

Bidder:

\_\_\_\_\_  
Legal name of entity

\_\_\_\_\_  
Address (street/city/state/zip)

\_\_\_\_\_  
Contact name                      Contact email

\_\_\_\_\_  
Contact telephone                  Contact fax

Project: Parking Lot B Renovations  
Rhode Island College  
600 Mount Pleasant Ave  
Providence, RI 02908

**1. BASE BID PRICE**

The Bidder submits this bid proposal to perform all of the work (including labor and materials) described in the solicitation for this Base Bid Price (*including the costs for all Allowances, Bonds, and Addenda*):

\$ \_\_\_\_\_  
(base bid price *in figures* printed electronically, typed, or handwritten legibly in ink)

• **Scope of Work**

The Contractor shall provide the work on the Contract Documents. The work in the contract shall include, but not be limited to, clearing and grubbing, pavement removal, cold planing, dewatering, disposal of excess soil material, excavation and embankment, erosion control, earthwork, trimming and fine grading, gravel borrow subbase course, bituminous base course, bituminous surface course, sawcutting pavement, installation of a new storm drainage system, concrete

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Solicitation Title: Rhode Island College – Parking Lot B Renovations

sidewalks, concrete wheelchair ramps, curbing, conduits, blue phones, lighting, temporary traffic control devices, signs, pavement markings, landscaping and seeding, dust control, providing uniformed traffic persons and flag persons, mobilization, maintenance and protection of pedestrian and vehicular traffic, permits, and other incidentals complete and accepted as necessary to complete the work of this contract as required by the Engineer.

The installation of all conduits, light pole configurations, and handholes associated with the security cameras and low voltage shall be included in the scope of work.

All security cameras, associated equipment, and low voltage cable shall be provided under allowance Number 7 in accordance with the unit pricing. Number of cameras and locations shall be approved by the College prior to ordering any of the cameras or associated equipment.

- **Allowances**

The Base Bid Price ***includes*** the costs for the following Allowances:

No. 1: Utility Relocation	\$20,000.00
No. 2: Disposal of regulated soil	\$5,000.00
No. 3: Disposal of hazardous waste	\$10,000.00
No. 4: Test Pits	\$5,000.00
No. 5: Repairs to Existing Manholes	\$5,000.00
No. 6: Replacement of Ex. Manholes	\$20,000.00
<u>No. 7: Low Voltage/Security Cameras</u>	<u>\$40,000.00</u>
Total Allowances:	\$105,000.00

- **Bonds**

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Solicitation Title: Rhode Island College – Parking Lot B Renovations

The Base Bid Price ***includes*** the costs for all Bid and Payment and Performance Bonds required by the solicitation.

• **Addenda**

The Bidder has examined the entire solicitation (including the following Addenda), and the Base Bid Price ***includes*** the costs of any modifications required by the Addenda.

*All Addenda must be acknowledged.*

Addendum No. 1 dated: April 8, 2015

Addendum No. 2 dated: April 15, 2015

Addendum No. 3 dated: \_\_\_\_\_

2. **ALTERNATES** (*Additions/Subtractions to Base Bid Price*)

The Bidder offers to: (i) perform the work described in these Alternates as selected by the State in the order of priority specified below, based on the availability of funds and the best interest of the State; and (ii) increase or reduce the Base Bid Price by the amount set forth below for each Alternate selected.

*Check "Add" or "Subtract."*

Description of Alternate No. 1:

\_\_\_ Add \_\_\_ Subtract    Alternate No. 1: Replace vertical granite curb with precast concrete curb

2. **UNIT PRICES**

The Bidder submits these predetermined Unit Prices as the basis for any change orders approved in advance by the State. These Unit Prices include ***all*** costs, including labor,

Solicitation #:7549436

Solicitation Title: Rhode Island College – Parking Lot B Renovations

materials, services, regulatory compliance, overhead, and profit.

Unit Price No. 1: Precast Concrete Curb	\$ _____/LF
Unit Price No. 2: Vertical Granite Curb	\$ _____/LF
Unit Price No. 3: 4" Parking Lot Underdrain	\$ _____/LF
Unit Price No. 4: Landscape Drain	\$ _____/EACH
Unit Price No. 5: Full Depth Pavement	\$ _____/SY
Unit Price No. 6: Reclaimed Full Depth Pavement Type 1	\$ _____/SY
Unit Price No. 7: Reclaimed Full Depth Pavement Type 2	\$ _____/SY
Unit Price No. 8: Catch Basin	\$ _____/EACH
Unit Price No. 9: Shallow Catch Basin	\$ _____/EACH
Unit Price No. 10 Drain Manhole 4' diameter, up to 4' depth	\$ _____/EACH
Unit Price No. 11 Drain Manhole 4' diameter, up to 8' depth	\$ _____/EACH
Unit Price No. 12 Drain Manhole 6' diameter, up to 4' depth	\$ _____/EACH
Unit Price No. 13 Drain Manhole 6' diameter, up to 8' depth	\$ _____/EACH
Unit Price No. 14 Disposal of Regulated Soil Material	\$ _____/TON
Unit Price No. 15 Disposal of Hazardous Waste	\$ _____/TON
Unit Price No. 16 Test Pit	\$ _____/EACH
Unit Price No. 17 Arecont Vision SurroundVideo® Omni Series camera (Installed)	\$ _____/EACH
Unit Price No. 18 Arecont Vision 4mm, f/1.6, Fixed Iris, MegaPixel Lens (Installed)	\$ _____/EACH

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Solicitation Title: Rhode Island College – Parking Lot B Renovations

Unit Price No. 19 Arecont Vision 8mm, f/1.6, Fixed Iris, MicroDome Lens (Installed)  
\$ \_\_\_\_\_/EACH

Unit Price No. 20 Arecont Vision 12mm, f/1.6, Fixed Iris, MicroDome Lens (Installed)  
\$ \_\_\_\_\_/EACH

Unit Price No. 21 Arecont Vision 2.8mm, f/1.8, Fixed Iris, MicroDome Lens (Installed)  
\$ \_\_\_\_\_/EACH

Unit Price No. 22 Arecont Vision 5 MP MegaDome (Installed)  
\$ \_\_\_\_\_/EACH

Unit Price No. 23 Arecont Vision Pole Mount Adapter (Installed)  
\$ \_\_\_\_\_/EACH

Unit Price No. 24 Arecont Vision Wall Mount Bracket with Junction Box and mount cap  
(Installed) \$ \_\_\_\_\_/EACH

Unit Price No. 25 Arecont Vision Indoor/Outdoor wall mount and junction box adapter  
(Installed) \$ \_\_\_\_\_/EACH

Unit Price No. 26 Pelco Spectra HD camera, camera arm, and pole mount (Installed)  
\$ \_\_\_\_\_/EACH

Unit Price No. 27 Ditek Power over Ethernet surge protection (Installed)  
\$ \_\_\_\_\_/EACH

Unit Price No. 28 Garrettcom switch part model 6KLP-48VDC (Installed)  
\$ \_\_\_\_\_/EACH

Unit Price No. 29 Garrettcom switch part model P6KL4-RJ45 (Installed)  
\$ \_\_\_\_\_/EACH

Unit Price No. 30 Garrettcom switch part model 6KL-2GSFP (Installed)  
\$ \_\_\_\_\_/EACH

Unit Price No. 31 Garrettcom switch part model 6KL-AC (Installed)  
\$ \_\_\_\_\_/EACH

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Unit Price No. 32 Garrettcom switch part model SFP-SX (Installed)  
\$ \_\_\_\_\_/EACH

Unit Price No. 33 Garrettcom switch part model SFP-LX10 (Installed)  
\$ \_\_\_\_\_/EACH

Unit Price No. 34 M9W039T MOHAWK 6 strand Versalite single mode cable (Installed in conduit provided under base scope)  
\$ \_\_\_\_\_/LF

Unit Price No. 35 M9C039T MOHAWK 6 strand Versalite OM3 Multimode (Installed in conduit provided under base scope)  
\$ \_\_\_\_\_/LF

Unit Price No. 36 M58772 MOHAWK cat 6 underground cable (Installed in conduit provided under base scope)  
\$ \_\_\_\_\_/LF

Unit Price No. 37 Milestone One Year SUP for XProtect Corporate Camera  
\$ \_\_\_\_\_/EACH

Unit Price No. 38 Milestone Cam License  
\$ \_\_\_\_\_/EACH

**3. CONTRACT TIME**

The Bidder offers to perform the work in accordance with the timeline specified below:

- Start of construction: June 1, 2015
- Substantial completion: August 15, 2015
- Final completion: September 15, 2015

**4. LIQUIDATED DAMAGES**

The successful bidder awarded a contract pursuant to this solicitation shall be liable for and pay the State, as liquidated damages and not as a penalty, the following amount for each calendar day of delay beyond the date for substantial completion, as determined in the sole discretion of the State: \$1,000 per day.

Solicitation #:7549436

Solicitation Title: Rhode Island College – Parking Lot B Renovations

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**This bid proposal is irrevocable for 60 days from the bid proposal submission deadline.**

**If the Bidder is determined to be the successful bidder pursuant to this solicitation, the Bidder will promptly: (i) comply with each of the requirements of the Tentative Letter of Award; and (ii) commence and diligently pursue the work upon issuance and receipt of the purchase order from the State and authorization from the user agency.**

**The person signing below certifies that he or she has been duly authorized to execute and submit this bid proposal on behalf of the Bidder.**

**BIDDER**

**Date:** \_\_\_\_\_

\_\_\_\_\_  
Name of Bidder

\_\_\_\_\_  
Signature in ink

\_\_\_\_\_  
Printed name and title of person signing on behalf of Bidder  
#

\_\_\_\_\_  
Bidder's Contractor Registration Number

**Parking Lot B Renovations , Rhode Island College**

**SUPPLEMENTAL CONDITIONS**

**VHB  
4/15/15**

**SUPPLEMENTAL      CONDITIONS**

## Parking Lot B Renovations , Rhode Island College

**Dewatering:** The Contractor shall provide dewatering as necessary to complete the work. The cost for dewatering will not be paid for separately. The Contractor shall include the cost for dewatering in the appropriate bid items.

**Material Removed and Discarded:** All excess material, unless noted otherwise, shall become the property of the Contractor and shall be legally disposed of by the Contractor. Payment for this work shall be included in the respective bid items.

**Completion Date:** It is anticipated that the work of this Contract will be completed and accepted by Rhode Island College on or before August 15, 2015. This project is based on a 10 week project schedule from date of purchase order to substantial completion. The assumed purchase order date is June 1, 2015. The contractor will be allowed full access to the parking lot from project start until substantial completion, which shall be August 15, 2015 at the latest. Substantial completion shall mean that the parking lot can be fully used for parking cars, inclusive of final pavement, lighting, signage, and pavement markings. If during the course of construction some parking can be used by the College without affecting the project schedule, it is appreciated by the College, but not required.

**Suggested Phasing and Sequencing of Construction:** The Contractor shall be responsible for developing and submitting a sequence of construction schedule which meets the completion date listed above. The contractor shall have full and complete responsibility and liability for the proper phasing and sequencing of the project in accordance with the Plans and Specifications and all applicable laws.

The Contractor shall adhere to the following requirements:

- a) The Contractor shall coordinate, cooperate and schedule his work and all segments thereof with the Engineer, other contractors, and applicable local authorities, so as to minimize impacts to the construction schedule.
- b) The Contractor shall notify Rhode Island College, Capitol Projects, in writing at least forty-eight (48) hours in advance of any road or parking closures. Upon the Engineer's approval, the Contractor shall coordinate the required traffic control.
- c) The Contractor shall submit traffic control and detour plans prepared and stamped by a Professional Engineer that addresses pedestrian, vehicular, and emergency vehicle access throughout construction. This plan must address pedestrian and vehicular traffic travelling between the east end of campus and the center of the campus. The east/west pedestrian circulation that must be provided to the public throughout construction includes the following:
  - along College Road traveling between parking lot A and Roberts Hall
  - between Building 1 through 6 on the east side and the Nazarian Center, Whipple Hall, and the Cooperative Pre-School on the west side.

The Contractor shall be responsible to provide signs, 6' high chain link project construction fencing around the entire project perimeter, and traffic control devices including jersey barriers as required to ensure the public's safety. All traffic control set-ups shall conform to the latest edition of the Manual on Uniform Traffic Control Devices, with latest revisions.

- d) Before starting construction activities that require traffic control, the Contractor shall furnish and install all traffic control. All temporary construction signs shall be removed, covered or otherwise concealed

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4/15/15  
CONDITIONS

SUPPLEMENTAL

## Parking Lot B Renovations , Rhode Island College

when they are not needed to properly warn drivers and/or pedestrians. The Contractor shall be compensated for this under Item Code 937.0200, "Maintenance and Movement Traffic Protection".

- e) The Contractor shall coordinate requirements for Uniformed Traffic Control Persons with the local police department.
- f) In cases of emergency and/or as directed by the Engineer, the Contractor shall move equipment to allow for the passage of emergency vehicles and/or open closed lanes to maintain traffic flow.
- g) The Contractor shall not commence work that impacts vehicular and pedestrian traffic until fabrication of all materials required to complete such work is finished and on site.
- i) The Contractor shall backfill or place steel plates, as approved by the Engineer, capable of supporting HS-25 wheel loading over all trenches and excavations that are not protected by barrier at the end of work each day except when otherwise directed by the Engineer. There shall be no additional compensation for backfilling, re-excavating and/or plating these trenches and excavations.

The Contractor shall be responsible to coordinate his work efforts with other construction projects.

**Nighttime Work:** The Contractor is allowed and expected to work at night to minimize traffic disruptions during the day.

**Project Coordination Meetings:** The Contractor shall attend weekly coordination meetings with the Rhode Island College Capitol Projects Administration. At each meeting, the Contractor shall provide a status update on work completed to date and a two week look ahead of work to be performed.

**Project Trailer:** The Contractor shall provide a construction trailer to accommodate weekly project coordination meetings.

**Field Survey:** The Contractor is responsible for survey on this contract. The Contractor shall verify the inverts of existing structures that the proposed drainage will be connected to. The Contractor shall provide this information to the Engineer for approval before ordering drainage structures and pipe materials.

**Test Pits:** The Contractor shall perform test pits at existing utilities where proposed drainage pipes will be installed over these facilities to determine the elevation of the existing facility. The Contractor shall provide this information to the Engineer for approval before ordering pipe materials.

**Temporary Access:** The Contractor shall backfill or place steel plates, as approved by the Engineer, capable of supporting HS-25 wheel loading over all trenches and excavations that are not protected by barrier at the end of each day except when otherwise directed by the Engineer. There shall be no additional compensation for backfilling, re-excavating, and/or plating these trenches and excavations.

VHB  
4/15/15  
CONDITIONS

SUPPLEMENTAL



RHODE ISLAND  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

March 25, 2015

Kevin Fitta, Director of Special Projects  
Rhode Island College  
600 Mount Pleasant Avenue  
Providence, RI 02908

**RE: RIPDES Stormwater General Permit for Construction Activity  
Rhode Island College – Parking Lots B and D  
RIPDES Permit Authorization No. RIR101245**

Dear Mr. Fitta:

Enclosed is your final authorization to discharge stormwater associated with construction activity under the Rhode Island Pollutant Discharge Elimination System (RIPDES) Program. The Authorization to Discharge should be attached to your copy of the 2013 RIPDES General Permit for Stormwater Discharge Associated with Construction Activity (2013 Construction General Permit), which you already have on file, and be kept on-site as verification of authorization to discharge. All terms and conditions outlined in the 2013 Construction General Permit must be met. Any permit non-compliance constitutes a violation of Chapter 46-12 of the Rhode Island General Laws of 1956, as amended, and is grounds for enforcement. For future references and inquiry, your permit authorization number is RIPDES No. RIR101245.

RIDEM strongly recommends that you obtain written assurances from contractors or subcontractors retained to undertake construction activity that they will comply with all applicable requirements. Both the owner and operator retained to undertake the construction activity are required to comply with all terms and conditions of the 2013 Construction General Permit. This includes maintaining the Soil Erosion and Sediment Control Plan onsite, performing the required inspections and maintenance of the selected control measures, and retaining inspection records. Further information on the requirements of the 2013 Construction General Permit is available at: <http://www.dem.ri.gov/pubs/regs/regs/water/ripdesca.pdf>.

#### Compliance Assistance

In order to help clarify the 2013 Construction General Permit requirements RIDEM has developed a compliance assistance tool entitled "The Construction Site Stormwater Compliance Assistance Program". Participation in this voluntary program will specifically identify for you and your site operator what RIDEM and the applicable regulations require you to do as you undertake your construction project.

Although participation in this compliance assistance initiative is voluntary, RIDEM strongly encourages your active participation. It is important to recognize that you as the construction site owner and your designated site operator **must** comply with the applicable requirements covered in

Office of Water Resources / Telephone: 401.222.4700 / Fax: 401.222.6177

RIR101245



30% post-consumer fiber

Mr. Kevin Fitta  
March 25, 2015  
Page 2

the certification workbook, regardless of whether or not you choose to participate in this program. One of the main benefits of this program is that it enhances your ability to comply with environmental regulations and helps you to prepare for a random regulatory inspection. We encourage you to take advantage of this opportunity to manage your project correctly and establish your expectations with your selected site operator early on in the project. **Please note that active sites that choose not to participate may be selected for a targeted regulatory inspection by the Department.** Sites found to be in non-compliance with the regulations noted on the checklist and in the workbook may be subject to significant penalties.

More information on this program can be found by going to the following webpage:  
<http://www.dem.ri.gov/programs/benviron/assist/ms4/index.htm>

This website will provide you with a wealth of information including a *Fact Sheet* which further explains the benefits of participation and the *Construction Site Stormwater Compliance Workbook* which will assist you in participating in the voluntary self-certification process.

Please be aware that the RIDEM's Rules and Regulations Governing the Establishment of Various Fees require 2013 Construction General Permit holders to pay an Annual Fee of \$100.00. An invoice will be sent to the owner on record in May/June of each year if the construction was still active as of December 31<sup>st</sup> of the previous year. The owner will be responsible for the Annual Fee until the construction activity has been completed, the site has been properly stabilized, and a completed Notice of Termination (NOT) has been received by the RIPDES Program. A copy of the NOT can be found attached to the 2013 Construction General Permit on the web page referenced on page 1 of this letter.

If you have any questions regarding the 2013 Construction General Permit or the contents of this letter, you may contact Joseph Camara of the RIPDES Program staff at (401) 222-4700, Extension 7640.

Sincerely,



Eric A. Beck, P.E.  
Supervising Sanitary Engineer  
RIPDES Permitting Program

Enclosure

ec: Jon Stabach, VHB  
Annie McFarland, DEM/OWR  
Traci Pena DEM/OWR

RIR101245

Permit No. RIR101245

AUTHORIZATION TO DISCHARGE UNDER THE  
RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM  
2013 General Permit for Stormwater Discharge Associated with Construction Activity

In compliance with the provisions of Chapter 46-12 of the Rhode Island General Laws, as amended,

Rhode Island College  
600 Mount Pleasant Avenue  
Providence, RI 02908

Is authorized to discharge Stormwater Associated with Construction Activity from a facility located at

Rhode Island College  
Parking Lots B and D  
600 Mount Pleasant Avenue  
Providence, RI 02908

to receiving waters named

Woonasquatucket River

in accordance with the conditions and requirements set forth in the 2013 General Permit for Stormwater Discharge Associated with Construction Activity.

In accordance with Part I.D.3.e of the 2013 General Permit for Stormwater Discharge Associated with Construction Activity, coverage shall become effective upon departmental receipt of a complete and certified NOI, project narrative, and site plan (in accordance with Part I.D.1.b.ii), unless notified to the contrary. Therefore, coverage under the 2013 General Permit for Stormwater Discharge Associated with Construction Activity became effective on December 30, 2014.

Coverage under the General Permit for Stormwater Discharge Associated with Construction Activity and the authorization to discharge should expire at midnight, on September 25, 2018.

The issuance of this authorization does not relieve the permittee from compliance with any other applicable laws or regulations administered by the Department of Environmental Management or any other governmental entity.

Signed this 25<sup>th</sup> day of March, 2015.



Eric A. Beck, P.E.  
Supervising Sanitary Engineer  
RIPDES Permitting Program, Office of Water Resources  
Rhode Island Department of Environmental Management  
Providence, Rhode Island

## Magnum 6KL Configuration Guide



Magnum 6KL Configurable Managed Edge Switch, base unit with DC power supply and four 10/100 copper ports. May be configured with a variety of 10/100/1000 Mb fiber and copper port connector types via selection from a family of 6K L port modules per this 6KL Configuration Guide. 10 ports max. Heavy duty fully enclosed metal case used as a heat sink, rated IP52 for environmental protection, no fans. For licensed network management software information (MNS-6K, MNS-6K-SECURE, and S-Ring), see their respective data sheets.

**Step 1. Slot A: Choose 6KL chassis and power input type:**

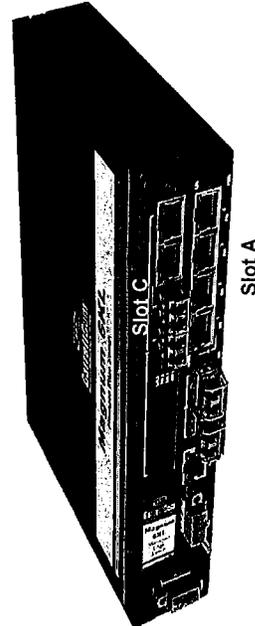
Model #	Base Unit, Description
6KL-24VDC	24V (18-36) DC power, slot A has 4 10/100 ports
6KL-12VDC	12V (10-15) DC power, slot A has 4 10/100 ports
6KL-48VDC	-48V (44-57) DC power, slot A has 4 10/100 ports
6KLP-48VDC	-48V (44-57) DC power, slot A has 4 PoE 10/100 ports
6KL-125VDC	125V (88-150) DC power, slot A has 4 10/100 ports
6KL-250VDC	250V (160-300) DC power, slot A has 4 10/100 ports
6KL-AC	100 to 240 VAC, 47 to 63 Hz, slot A has 4 10/100 ports

**Step 2. Slot C: If more than 4 ports at 10/100 or fiber at 100Mb is desired, choose one module from below.**

Slot C is always **four** ports, of which a maximum of four may be 100Mb

Module Model #	10/100 RJ-45 Copper	100BASE-FX Fiber SFF
6KL4-RJ45	4	0
P6KL4-RJ45 (requires 6KLP-48VDC chassis)	4 (PoE 802.3at)	0
PP6KL4-RJ45 (requires either 48VDC chassis)	4 (PoE 802.3at)	0
6KL4-4MLC	0	4 mm LC 2km
6KL4-2MLC2RJ	2	2 mm LC 2km
6KL4-4SLC	0	4 sgl.m LC 20km
6KL4-2SLC2RJ	2	2 sgl.m LC 20km
6KL4-2SST2RJ	2	2 sgl.m ST 20km
6KL4-4SLCL	0	4 sgl.m LC 40km
6KL4-2SLCL2RJ	2	2 sgl.m LC 40km
6KL4-4MT	0	4 mm MTRJ 2km
6KL4-2MT2RJ	2	2 mm MTRJ 2km
6KL4-4MSC	0	4 mm SC 2km
6KL4-2MSC2RJ	2	2 mm SC 2km
6KL4-4MST	0	4 mm ST 2km
6KL4-2MST2RJ	2	2 mm ST 2km
6KL4-2SLC2MLC	0	2 mmSC, 2smSC

Module Model #	10/100 RJ-45 Copper	100BASE-FX Fiber SFF
6KL4-1MT3RJ	3	1 mm MTRJ 2km
6KL4-1MLC3RJ	3	1 mm LC 2km
6KL4-1SLC3RJ	3	1 sgl.m LC 20km
6KL4-1SLC3RJ	3	1 sgl.m LC 40km
6KL1-1MT	0	1 mm MTRJ 2km
6KL1-1MLC	0	1 mm LC 2km
6KL1-1SLC	0	1 sgl.m LC 20km
6KL1-1SLCL	0	1 sgl.m LC 40km
6KL4-1SL3MLC	0	1 mm LC 2km 3 sgl.m LC 20km
6KL4-2SL2MLC	0	2 mm LC 2km 2 sgl.m LC 20km
6KL4-1ML1SLC2RJ	2	1 mm LC 2km 1 sgl.m LC 20km
6KL4-2SSC2RJ	2	2 sgl.m SC 20km
6KL4-4SSC	0	4 sgl.m SC 20km
6KL4-4SSCL	0	4 sgl.m SC 40km



**Step 3. Slot B: Choose from the following for optional Gb (Gb is only available in slot B. Slot B may only be Gb).**

Module Model #	Gigabit
<i>Gb Modules, fixed ports--SFP</i>	
6KL-2GSFP	2 SFP
6KL-2GCU	2 CU

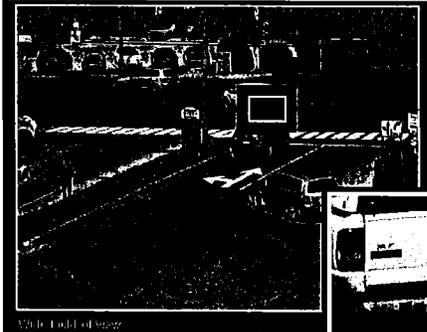
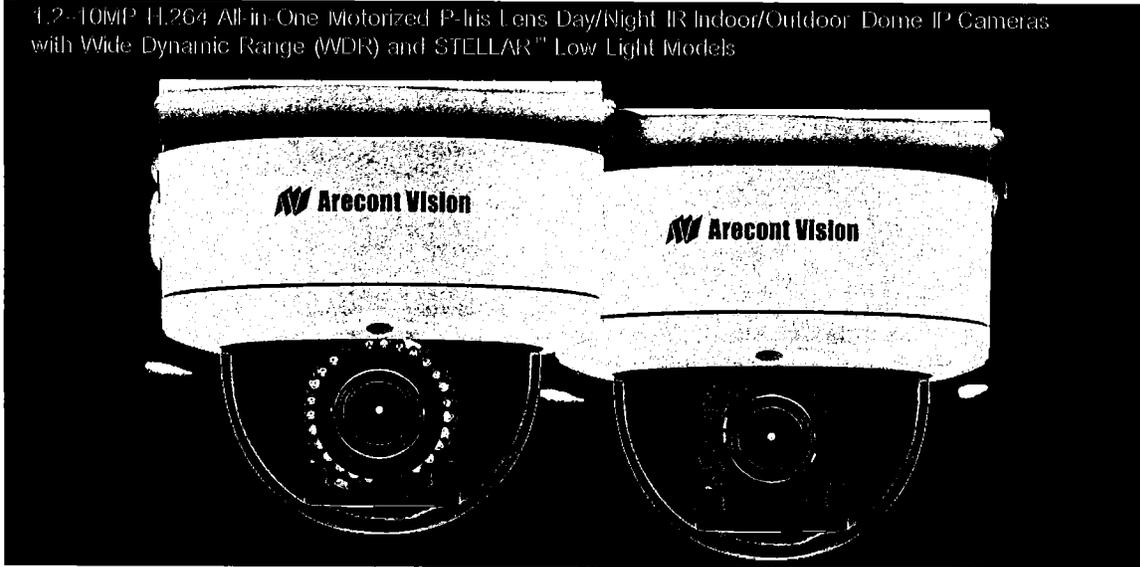
<i>Gb SFP fiber optic transceivers</i>	
SFP-GTP	Gb Copper
SFP-SX	Gb SX, 850nm wavelength, 550 meters distance
SFP-ESX	Gb SX, 1310nm wavelength, 2km distance
SFP-LX10	Gb LX, 1310nm wavelength, 10km distance
SFP-LX25	Gb LX, 1310nm wavelength, 25km distance
SFP-ZX40	Gb ZX, 1550nm wavelength, 40km distance
SFP-ZX70	Gb ZX, 1550nm wavelength, 70km distance

**Step 4. Choose options and extras:**

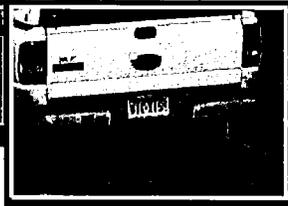
Model #	Description
DIN-Rail-6KL	DIN-Rail mount for 6KL
KL-2TRAY	Rack-mount tray for 2 6KM for 19" mounting
DUAL-SRC	2 separate power inputs (12/24/48/125V)
S-RING-KEY	Software, self-healing ring management
CONSOLE-CBLQD	Console attachment cable serial null Modem (aka X-modem) cable with DB9 connectors
CONSOLE-CBLQU	As above, but with a USB connector
CONFORM 05-CRM	Conformal coating, 5 mil, for moisture protection
CONFORM 08-CRM	Conformal coating, 8 mil, for corrosive environ.
MNS-6K-SECURE	Optional, licensed per switch for extra security

# MegaDome® 2 Megapixel IP Cameras

1.2-10MP H.264 All-in-One Motorized P-Iris Lens Day/Night IR Indoor/Outdoor Dome IP Cameras with Wide Dynamic Range (WDR) and STELLAR™ Low Light Models



Wide Field of View



Zoom-In Details

## All-in-One Solutions – MegaDome® 2

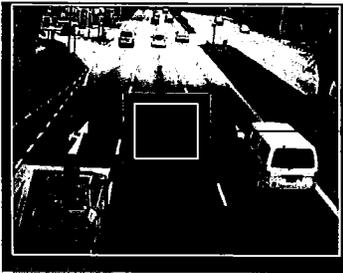
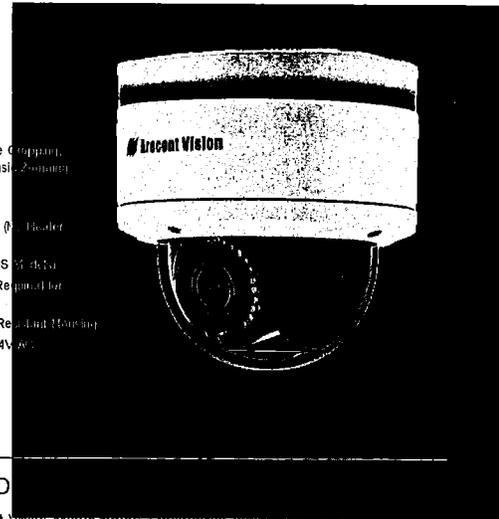
MegaDome® 2 multi-megapixel cameras provide superior resolution to zoom-in for details in live or recorded video. These indoor/outdoor all-in-one solutions integrate a 1.2-, 1.3-, 1080p, 3-, 5- or 10-megapixel (MP) camera with fast frame rates and an IR corrected motorized wide angle or telephoto vari-focal lens into an IP66 environmental rated and IK-10 impact-resistant dome housing. Remote focus and remote zoom make MegaDome® 2 easy to install and manage. MegaDome® 2 cameras are also available in manual lens models.

- |  |  |   |                                      |   |  |                                |   |                                   |
|--|--|---|--------------------------------------|---|--|--------------------------------|---|-----------------------------------|
|  |  |   |                                      |   |  |                                |   |                                   |
| Integrated Motorized Lens with Remote Focus and Zoom (AM/PM Version) | P-Iris Control for Best Depth of Field and Image Clarity (PM Models) | Wide Dynamic Range Available on Some 1080p and 3MP Models | Dual Mode: 1080p/10MP on 10MP Models | STELLAR™ Low Light Technology on 1.2MP Models | Wide Angle or Telephoto Lens Option                    | IR LEDs (IR Models)            | Impact / Weather Resistant IK-10 and IP66 Rated | True Day/Night with IR Cut Filter |
|  |  |   |                                      |   |  |                                |   |                                   |
| All-in-One Dome Solution   | Pixel Binning Mode on 3, 5, and 10MP Models                          | CorridorView™ with 90° Image Flip (-S Models)             | SDHC Card Slot (-S Models)           | Dual Encoder H.264/MJPEG                      | Casino Mode™ Maintains at Least 30fps on AV225S Models | Audio Input/Output (-A Models) | Heater (-H Models)                              |                                   |

## MegaDome® 2 Megapixel IP Cameras

### Highlighted Features:

- Remote Focus/Zoom Motorized Auto-Iris or P-Iris Lens (A/M/PM Models)
- P-Iris Control to Get Best Depth of Field and Image Clarity (P/M Models)
- Wide Angle or Telephoto Lens Options
- Optional True WDR up to 100dB at Full Resolution Available on Some 1080p and 3MP Models; See Clearly in Shaded and Bright Light Conditions Simultaneously
- STELLAR™ Low Light Technology Reduces Motion Blur, Noise and Storage Requirements, While Enhancing Contrast and Allowing Color Imaging in Near Complete Darkness on 1.2MP Models
- True Day/Night Functionality with Mechanical IR Cut Filter and Optional IR LEDs
- Binning Mode for Strong Low Light Performance on 3MP, 5MP and 10MP Cameras
- Casino Mode™ Guarantees Continuous 30fps Frame Rate Required by Gaming Industry Regulations (AV2255 Models)
- CorridorView™ Allows 90° Image Rotation for Better Coverage in Hallways and Corridors
- Dual Encoder H.264/MJPEG
- Privacy Mask, Motion Detection, Flexible Bit Rate Control, Multi-Streaming, Forensic and Non-Integer Scaling
- Fast Frame Rates
- Heater and Optional Audio and IR LEDs (Required for WDR Models)
- SDHC Card Slot for Onboard Storage (Optional)
- TotalPoE Solution (No External Power Required for Heater and IR LEDs)
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing
- PoE and Auxiliary Power: 12-48V DC/24V AC
- Easily Adjustable 3-Axis Gimbal
- PSIA Conformant
- User-Friendly Web Interface
- Made in the USA



Wide Field of View



Telephoto Field of View

### See D

Arecont Vision MegaDome® 2 megapixel cameras deliver outstanding resolution to capture every detail whether viewing live or recorded/archived video. With the ability to digitally Pan-Tilt-Zoom (PTZ) images, you can view the details you need to see at any time, such as license plates, faces and other objects of interest. The superior resolution of MegaDome® 2 megapixel cameras along with their varying fields of view allows them to do the work of multiple conventional cameras and provide critical forensic information—all without the need and associated expense of system operators having to "catch" activities of interest as they occur.

## STELLAR™ Technology and Enhanced Low Light Performance

MegaDome® 2 now features a 1.2MP model with Spatio Temporal Low Light Architecture (STELLAR™) technology, which allows for color imaging in near complete darkness. Arecont Vision® STELLAR™ technology utilizes a patented algorithm that reduces noise, motion blur, bit rate and storage requirements. Along with adaptive contrast enhancement, MegaDome® 2 with STELLAR™ has superior low light sensitivity, making it capable of covering areas where very little light is present.



Color Image without STELLAR™ Technology at 0.1 Lux



Color Image with STELLAR™ Technology at 0.1 Lux

In addition to STELLAR™ models, all MegaDome® 2 camera models are equipped with Day/Night operation, and MegaDome® 2 cameras that are 3MP or higher include pixel binning to reduce noise. These functionalities along with integrated IR illumination provide a winning combination in complete darkness.

## MegaDynamic® Wide Dynamic Range (WDR)

Users can achieve clear images in extreme lighting conditions with MegaDome® 2 WDR cameras in resolutions of 1080p and 3MP. Wide Dynamic Range up to 100dB at full resolution balances light and dark areas in the same scene, such as in the lobby of an office building or the loading dock at a distribution facility. Optional IR illuminators provide coverage in total darkness for a 24-hour solution.



Megapixel Image without WDR

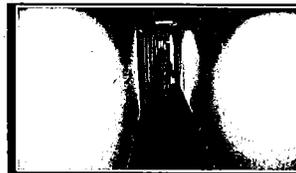


Megapixel Image with WDR

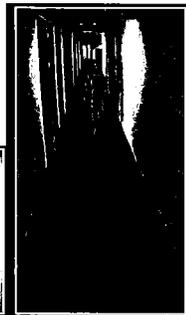
## CorridorView™

With CorridorView™, MegaDome® 2 can rotate or flip pixels in 90° increments.

This works great for narrow hallways where pixels are often wasted capturing the surrounding walls.



Standard View

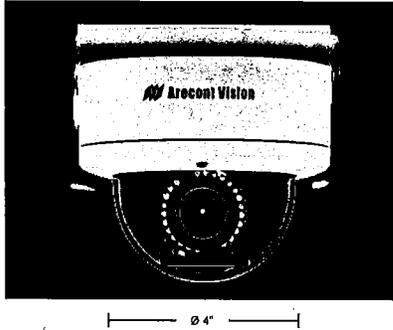


CorridorView™



# MegaDome® 2 Megapixel IP Cameras

## Configurations



## Accessories

MD2-HK 2 Watt Heater		MD-FMA Flush Mount Adapter	
MD-JBA Indoor/Outdoor Junction Box Adapter (For MD-CMT Only)		MD-WMT2 Wall Mount (1.5" NPT Standard)	
MD-EBA Electrical Box Adapter Plate		MD-CMT Pendant Mount	
SV-EBA Electrical Box Adapter		AV-PMA Pole Mount Adapter	
SV-JBA Junction Box Adapter (For MD-WMT2 Only)		AV-CRMA Corner Mount Adapter	



## Global Sales and Support

Arecont Vision is the leading manufacturer of high-performance megapixel IP cameras and associated software. All Arecont Vision cameras are made in the USA.

### Americas

Los Angeles, CA, USA  
Arecont Vision, LLC. Headquarters  
425 E. Colorado St., 7th Floor  
Glendale, CA 91205, USA

Phone: +1.818.937.0700  
Toll Free: 877.CAMERA.8  
Fax: +1.818.937.0464

Sales  
Phone: +1.818.937.0700 x3  
Email: [avsales@arecontvision.com](mailto:avsales@arecontvision.com)

Support  
Phone: +1.818.937.0700 x1  
Email: [support@arecontvision.com](mailto:support@arecontvision.com)

Latin America  
Email: [latam.sales@arecontvision.com](mailto:latam.sales@arecontvision.com)

### EMEA

Frankfurt, Germany  
Phone: +49.69.6953.4600  
Email: [europe.sales@arecontvision.com](mailto:europe.sales@arecontvision.com)

Moscow, Russia  
CJSC Arecont Vision  
Phone: +7.495.649.0577  
Fax: +7.495.221.5227  
Email: [info@arecontvision.ru](mailto:info@arecontvision.ru)

Middle East  
Email: [mena.sales@arecontvision.com](mailto:mena.sales@arecontvision.com)

Africa  
Email: [africa.sales@arecontvision.com](mailto:africa.sales@arecontvision.com)

### APAC

China  
Phone: +86.180.0179.1799  
Alt. Phone: +1.526.215.5300  
Fax: +1.818.649.3404  
Email: [apac.sales@arecontvision.com](mailto:apac.sales@arecontvision.com)



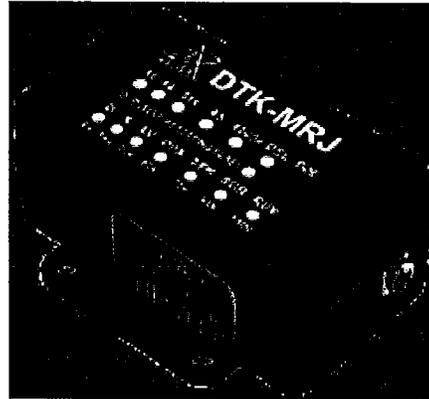
Rev 903.002



## DTK-MRJPOE

### Power Over Ethernet Gigabit Ethernet Power/Video/Data Surge Protection General Product Specifications

DITEK's MRJPOE protects circuits that use state-of-the-art Power Over Ethernet connections. This point of use surge protector can be installed either at the equipment end or ahead of injectors or midspan devices. The DTK-MRJPOE is ideal surge protection for PoE DVRs, NVRs, cameras, telephones and access control systems.



### DTK-MRJPOE

#### Product Features

- Protects power, video and data on fixed or PTZ cameras
- RJ45 connection with external grounding screw
- Ethernet data speed without signal degradation
- Multi-stage, SAD technology, hybrid design provides the best possible protection
- Complies with IEEE Std. 802.3af and 802.3at for PoE
- Available as a single device or 12-Port, 1U Rack Mount (DTK-RM12POE)
- PoE Plus ready for high-wattage applications
- Ten Year Limited Warranty

#### Performance Data

	DTK-MRJPOE
Service Voltage	48V
MCOV	64V
Clamp Voltage	72V
Peak Surge Current	30A/pair

#### Specifications

**Agency Approvals:** UL497B

**Standards Compliance:**

CAT5e, EIA/TIA568A, EIA/TIA568B

**Connection Method:** RJ45 In/Out

**Pinout:** All 8 pins are protected

**Data Rate:** Gigabit Ethernet

**Max Continuous Current:** 1.5 Amps

**Dissipation:** 3,000W/pair (10/1000µs impulse)

**Protection Modes:** Line-Ground (All)

**Operating Temperature:** -40°F - 158°F (-40°C - 70°C)

**Maximum Humidity:** 95% non-condensing

**Dimensions:** 1.7" x 3.0" x 1.2"

(43mm x 76mm x 30mm)

**Weight:** 4oz (113g)

**Housing:** ABS

One DITEK Center  
1720 Starkey Road  
Largo, FL 33771

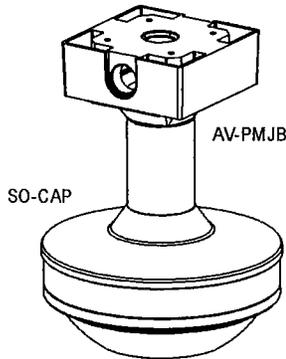
1-800-753-2345 Direct: 727-812-5000  
Technical Support: 1-888-472-6100  
[www.ditekcorp.com](http://www.ditekcorp.com)

Doc. Number: SPS-100042-001 Rev 11 02/12  
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Specification Subject to Change

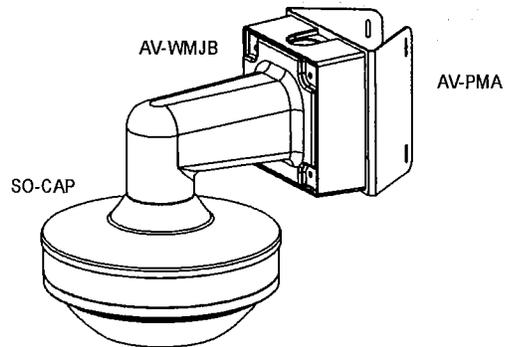


# SurroundVideo® Omni Accessories

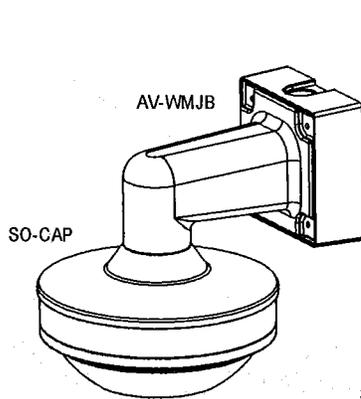
Accessories for Indoor/Outdoor Ceiling, Wall, Pole and Corner Mounting Solutions



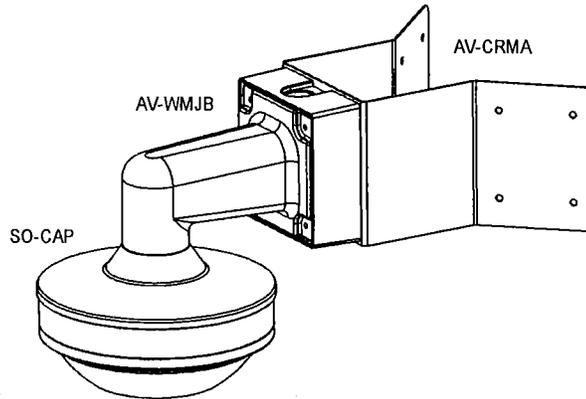
Ceiling Mount Configuration



Wall Mount Configuration with Pole Mount Adapter



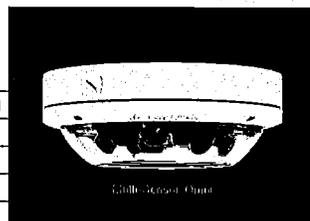
Wall Mount Configuration



Wall Mount Configuration with Corner Mount Adapter

Model Compatibility

12 Megapixel	20 Megapixel
AV12176DN-NL	AV20175DN-NL
AV12176DN-28	AV20175DN-28
AV12176DN-08	AV20175DN-08



### AV-PMJB

Pendant Mount Bracket with Junction Box

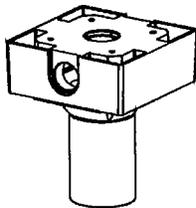
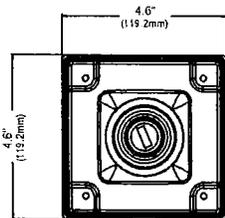
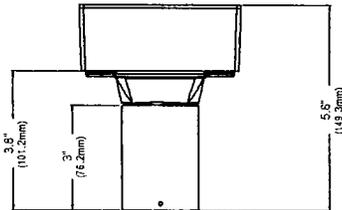


**Features:**

- Easy Installation and Superior Design
- Heavy Duty Enclosure Protection for Applications in Harsh Environments
- Di-Cast Aluminum is Resistant to Impact and Salt Damage

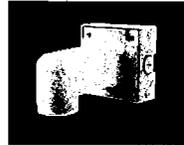
**Compatibility** Compatible with 1.5" NPT Female  
Works with SurroundVideo® Omni Series

**Mechanical** Casing Material Aluminum  
Color Ivory (Pantone cool gray 1c)  
Dimensions 5.87" H (149.31mm) x 4.69" W (119.20mm)  
Weight w/o Camera 2.12lbs (0.96kg)



### AV-WMJB

Wall Mount Bracket with Junction Box

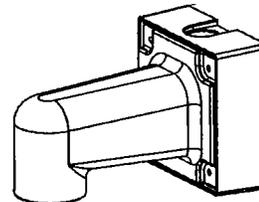
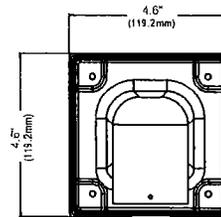
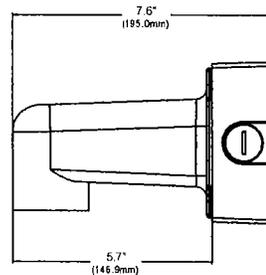


**Features:**

- Easy Installation and Superior Design
- Heavy Duty Enclosure Protection for Applications in Harsh Environments
- Di-Cast Aluminum is Resistant to Impact and Salt Damage

**Compatibility** Compatible with 1.5" NPT Female  
Works with SurroundVideo® Omni Series

**Mechanical** Casing Material Aluminum  
Color Ivory (Pantone cool gray 1c)  
Dimensions 7.68" L (195.05mm) x 4.69" W (119.20mm)  
Weight w/o Camera 2.49lbs (1.13kg)



### SO-CAP

Mounting Cap for SurroundVideo® Omni

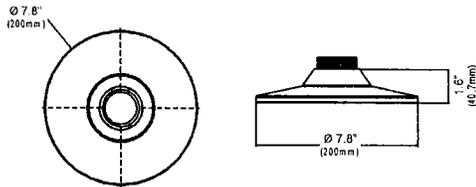


**Features:**

- Easy Installation and Superior Design
- Heavy Duty Enclosure Protection for Applications in Harsh Environments
- Di-Cast Aluminum is Resistant to Impact and Salt Damage

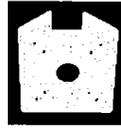
**Compatibility** Compatible with 1.5" NPT Male  
Works with SurroundVideo® Omni Series

**Mechanical**  
**Casing Material** Aluminum  
**Color** Ivory (Pantone cool gray 1c)  
**Dimensions** Ø 7.8" (200mm) x 1.6" H (40.79mm)  
**Weight** w/o Camera 0.85lbs (0.39kg)



### AV-PMA

Pole Mount Adapter

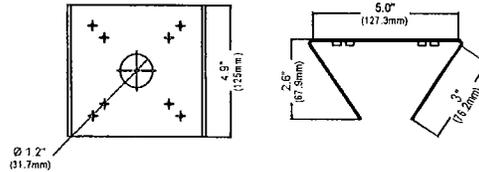


**Features:**

- Easy Installation and Superior Design
- Heavy Duty Enclosure Protection for Applications in Harsh Environments
- Di-Cast Aluminum is Resistant to Impact and Salt Damage

**Compatibility** Works with AV-PMJB and AV-WMJB

**Mechanical**  
**Casing Material** Aluminum  
**Color** Ivory (Pantone cool gray 1c)  
**Dimensions** 5.01" W (127.32mm) x 4.92" H (125mm)  
**Weight** w/o Camera 0.32lbs (0.15kg)



### AV-CRMA

Corner Mount Adapter

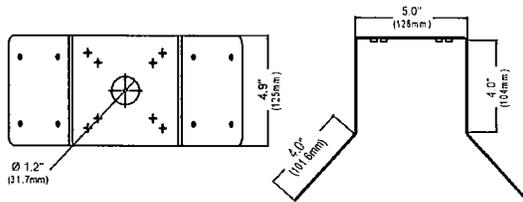


**Features:**

- Easy Installation and Superior Design
- Heavy Duty Enclosure Protection for Applications in Harsh Environments
- Di-Cast Aluminum is Resistant to Impact and Salt Damage

**Compatibility** Works with AV-PMJB and AV-WMJB

**Mechanical**  
**Casing Material** Aluminum  
**Color** Ivory (Pantone cool gray 1c)  
**Dimensions** 13.04" W (331.25mm) x 4.92" H (125mm)  
**Weight** w/o Camera 0.59lbs (0.27kg)



### SV-EBA

Electrical Box Adapter

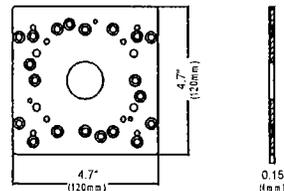


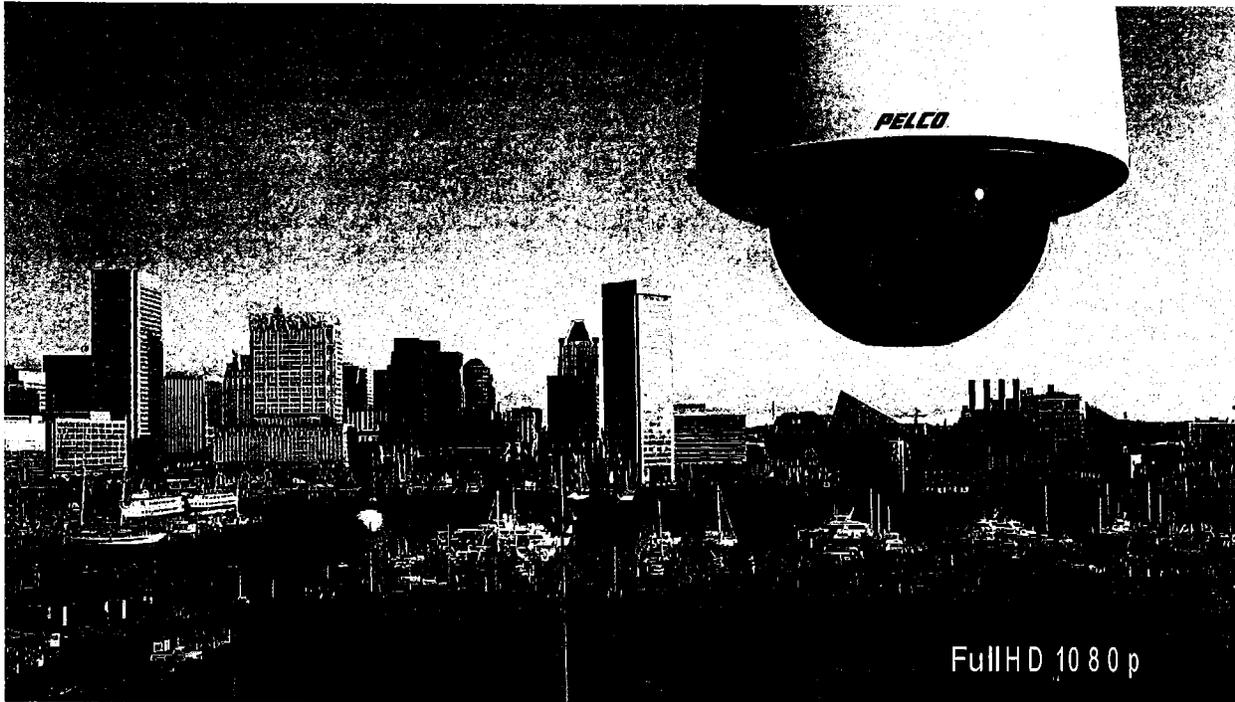
**Features:**

- Easy Installation and Superior Design
- Heavy Duty Enclosure Protection for Applications in Harsh Environments
- Di-Cast Aluminum is Resistant to Impact and Salt Damage

**Compatibility** Compatible with Common Electrical Box, such as single gang box, double gang box or 4" square electrical box, etc.

**Mechanical**  
**Casing Material** Aluminum  
**Color** Ivory (Pantone cool gray 1c)  
**Dimensions** 4.7" L (120mm) x 4.7" W (120mm) x 0.15" H (4mm)  
**Weight** w/o Camera 0.3lbs (0.13kg)





# Take HD positioning system performance to the next level.

Introducing Spectra HD 1080 —the definition of image quality.

For years you've relied on the sophisticated dome positioning systems brought to you by Pelco™ by Schneider Electric™. Now more sophisticated than ever, Pelco introduces the new Spectra™ HD 1080. Incorporating the award-winning Sarix™ imaging technology platform, Spectra HD 1080 is an all-digital system that delivers 2-megapixel resolution (1920x1080 at 30 FPS), high-profile H.264 compression, built-in analytics, and much more. Featuring HD-optimized dome bubble technology, a revolutionary solid pendant design to eliminate vibration noise, 20X or 30X optical zoom with 12X digital zoom, and precise 360-degree PTZ control, Spectra HD 1080 has set the new industry standard for high-definition image quality and video security performance.



[www.pelco.com](http://www.pelco.com)

Choose with confidence.

**PELCO™**

by Schneider Electric

# Spectra HD performance



## PRODUCT AT A GLANCE

- Up to 1920 x 1080 resolution
- 16:9 aspect ratio; 1080p at 30 images per second (ips)
- 2.0 megapixel (MPx), 20X or 30X optical zoom, 12X digital zoom,
- Wide dynamic range (WDR) camera
- Ability to control and monitor video over IP networks
- Nine Built-in analytics, including AutoTracker and adaptive motion detection
- Two simultaneous video streams: Dual H.264 or H.264 and scalable MJPEG
- 360° continuous pan rotation at 280° per second
- Supported protocols: TCP/IP, UDP/IP (Unicast, Multicast IGMP), UPnP, DNS, DHCP, RTP, NTP, and more
- Power over ethernet (PoE) IEEE 802.3af \*for non-environmental units only
- USB expansion slots for Pelco alarms and audio accessories
- 16 preset tours, 255 dome presets, 32 window blanks
- Open IP standards
- ONVIF conformant



Spectra HD 1080 delivers an amazing 1920x1080 image at full high-definition standards. Intended for use with Pelco and other leading video management systems, it can also be used with most web browsers. With almost six times the resolution of standard definition domes, Spectra HD 1080 helps you see the most important details in almost any scene where definition, color fidelity, and clarity means more than just a big picture.

### Open architecture

ONVIF™ conformant and based on an open architecture, Spectra HD 1080 domes are designed to work with the industry's leading video management solutions. The Pelco Partner First Program is continuously developing new partnerships and strategic relationships with developers to ensure that Spectra HD systems seamlessly integrate with any head-end system.

### Standard web interface

Pelco cameras use a standard Web browser interface for easy remote setup and administration. Controls are optimized for convenient one-step camera configuration for features including color, exposure, and streaming. Through the GUI, users have advanced pan/tilt/zoom management features, including click-to-center, box draw, and drag pan/tilt/zoom for the ultimate in smooth control.

### Solid pendant design, optically precise bubble

The demands of high-definition video are precise. Spectra HD 1080 has met the challenge by engineering two new build enhancements. The first is a solid dual-pendant design that eliminates subtle vibrations that can occur among the various components of the dome system. The second enhancement is an optically precise bubble that ensures that you get the most from your HD camera investment.

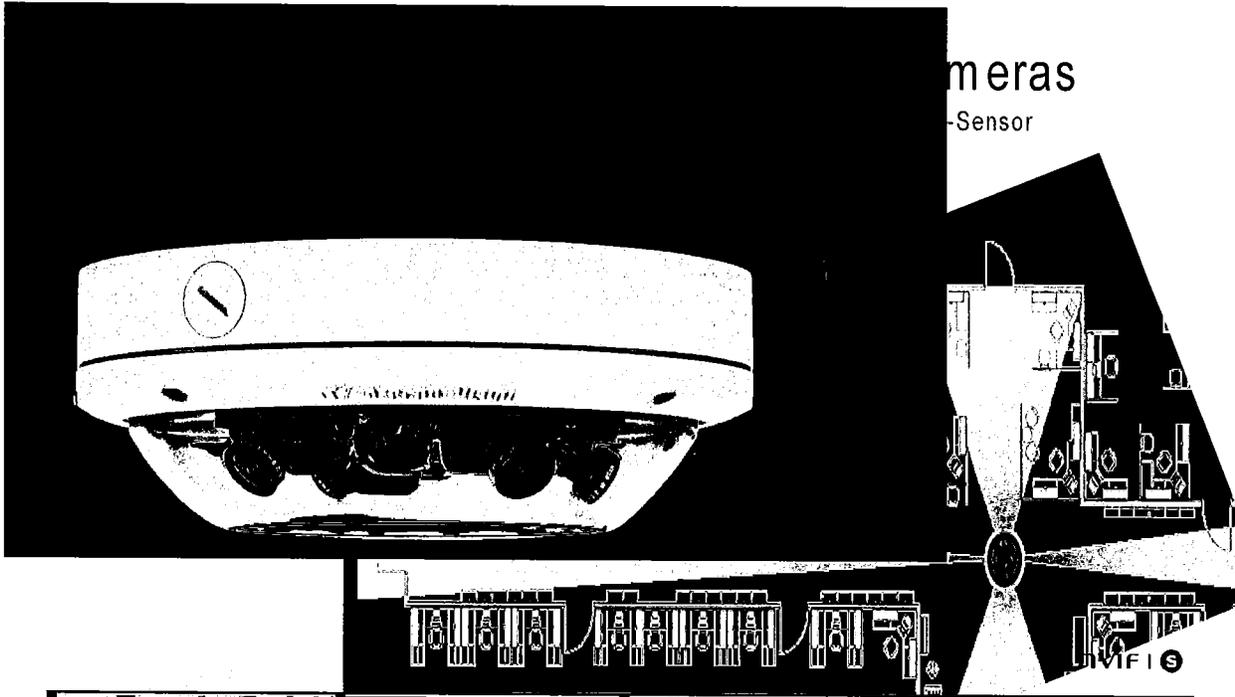
### System model numbers

Type	Back box color	Lower dome	Spectra HD, 2.0 MPx, 20X	Spectra HD, 30X
In-ceiling, indoor	White with white trim ring	Smoked	S5220-FW0	S5230-FW0
		Clear	S5220-FW1	S5230-FW1
In-ceiling, environmental	Black with black trim ring	Smoked	S5220-YB0	S5230-YB0
		Clear	S5220-YB1	S5230-YB1
Pendant, standard	Gray	Smoked	S5220-PG0	S5230-PG0
		Clear	S5220-PG1	S5230-PG1
	Black	Smoked	S5220-PB0	S5230-PB0
		Clear	S5220-PB1	S5230-PB1
Pendant, environmental	Gray	Smoked	S5220-EG0	S5230-EG0
		Clear	S5220-EG1	S5230-EG1
Pendant, environmental stainless steel	Gray	Smoked	S5220-ESG0	S5230-ESG0
		Clear	S5220-ESG1	S5230-ESG1

### Component model numbers

Back box	High definition (HD) lower dome*	Dome drive
B52-F In-ceiling	LDHDF-0 In-ceiling, smoked	D5220F In-ceiling, 20X
B52-F-E In-ceiling, environmental	LDHDF-1 In-ceiling, clear	D5220P Pendant, 20X
B52-PG Pendant, gray	LDHDPB-0 Pendant, smoked	D5230F In-ceiling, 30X
B52-PB Pendant, black	LDHDPB-1 Pendant, clear	D5230P Pendant, 30X
B52-PG-E Pendant, gray, environmental	LDHDSS-0 Pendant, smoked, stainless steel	
B52-PSG-E Pendant, gray, environmental, stainless steel	LDHDSS-1 Pendant, clear, stainless steel	

\*Use the pendant, lower dome with the environmental in-ceiling and environmental pendant back boxes.



Cameras  
-Sensor



Example images from 12MP SurroundVideo® Omni with WDR and three 3mm and one 12mm lens

**Use One Megapixel Surround Video® Omni for a Wide Range of Requirements.**

Delivering revolutionary flexibility, Arecont Vision SurroundVideo® Omni multi-sensor, multi-megapixel cameras provide ample resolution to zoom-in for details in live and recorded video. With multiple imagers, each with a choice of an IR corrected lens, one SurroundVideo® Omni can replace 4 standard cameras, requiring just a single installation with only one ethernet cable.

A unique track design allows four individual sensor gimbals to be independently placed in nearly any configuration. Popular uses of SurroundVideo® Omni IP66 rated / IK-10 impact-resistant cameras are to

cover the intersection of hallways or to provide a 270° view at the corner of a building.

SurroundVideo® Omni cameras are available in total resolutions of 12 megapixels (MP) or 20 megapixels. Optional lenses can be selected from a choice of 2.8, 4, 6, 8, 12 and 16mm. Wide Dynamic Range (WDR) that delivers up to 100dB at full resolution is available in the 12MP model. H.264 compression reduces bandwidth and storage requirements, while delivering full frame rates and resolution, without sacrificing image quality.

- 

Omni-Directional Track with  
4 Customizable Sensors
- 

270° FOV  
Capable
- 

WDR  
Wide Dynamic Range  
on 12MP Models
- 

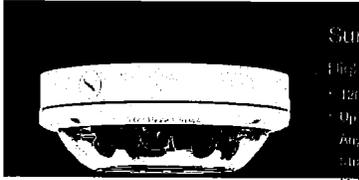
True Day/Night  
with IR Cut Filter
- 

Pixel Binning Mode
- 

Dual Encoder  
H.264/MJPEG
- 

Ultra Low Profile  
Design
- 

Impact / Weather Resistant  
IK-10 and IP66 Rated



## SurroundVideo® Omni IP Megapixel Cameras

### Highlighted Features:

- 12MP WDR and 20MP Configurations
- Up to 4 Individual Camera Gimbals can be Independently Placed in Any Orientation Around a 360° Track with Extra Positions for Looking Straight Down
- Multiple Lens Options in a Single Camera Housing from 2.8mm up to 16mm
- True WDR up to 100dB at Full Resolution: See Clearly in Shaded and Bright Light Conditions Simultaneously
- True Day/Night Functionality with Mechanical IR Cut Filter
- Binning Mode for Strong Low Light Performance
- Forensic Zooming – Zoom Live or After the Event While Recording Full Field-of-View in HD – Replace PTZ Devices
- Fast Frame Rates
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control and Multi-Streaming
- Dual Encoder H.264/MJPEG
- PoE and Auxiliary Power: 12–48V DC/24V AC
- Ultra Discrete, Low-Profile Housing
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing
- Complete Mounting Options
- Reduced Overall System Cost
- ONVIF ProfileS Compliant
- Made in USA

## SurroundVideo® Omni Versatility

multiple single sensor cameras. One where the ability to choose different image quality and pixel density.

**Indoor Hallway Intersection Layout**  
Telephoto and 2 Wide Angle Lenses

Another great example of the versatility of the SurroundVideo® Omni is the corner layout. Configuring the camera's 4 sensors in the corner layout will provide a seamless 270° field of view as well as a view looking directly underneath the camera. No other camera can provide this level of coverage on a building corner.

**Corner Layout**  
(790° Lenses)

## Reduce the Number of Cameras to Improve Coverage and Simplify Installation

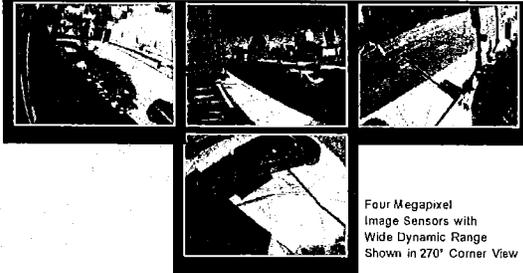
Arecont Vision megapixel technology delivers superior image quality and reduces overall system costs by covering larger areas with fewer cameras.

An area typically requiring multiple pan-tilt-zoom (PTZ) cameras or multiple fixed cameras can be covered with a single SurroundVideo® Omni

multi-sensor camera. SurroundVideo® Omni delivers comprehensive coverage and forensic detail. It is user-configurable to achieve maximum coverage in the desired areas of interest. As a result, SurroundVideo® Omni eliminates the propensity of a PTZ to be facing the wrong way when an incident occurs.

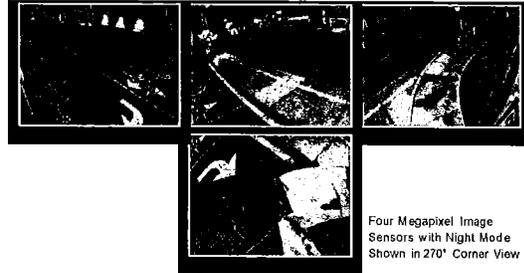
## MegaDynamic\* Wide Dynamic Range (WDR)

The 12MP SurroundVideo\* Omni camera produces clear images in extremely challenging lighting conditions. Arecont Vision's WDR technology delivers a dynamic range of up to 100db at full resolution, without lowering frame rates. WDR maximizes the amount of detail in both bright and dark areas of a scene. The WDR performance of the SurroundVideo\* Omni megapixel camera represents an up to 50dB improvement (300x) in dynamic range compared to non-WDR cameras.

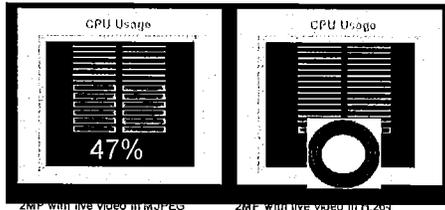


## Enhanced Low Light Performance

As part of their superior True Day/Night operation, SurroundVideo\* Omni cameras include low light enhancing technology with a mechanical IR (infrared) cut filter, pixel binning and adaptive noise-cancellation. Day/Night capability automatically switches from color to black/white operation to increase sensitivity and image clarity at night or in unlit spaces.



## H.264 Decompression (example)



## Compliant H.264 Compression by Arecont Vision

SurroundVideo\* Omni's compliant implementation of H.264 allows full frame rates and full resolution without sacrificing image quality. With bit rate control, the CPU load of the NVR or VMS servers is decreased at both the client (decompression) side and the server/storage side. This allows lower bandwidth and storage relative to MJPEG. Real Time Streaming Protocol (RTSP) allows for compatibility with Apple QuickTime\*, VLC and other media players.

## Model Comparison

NVIF I 3

Model	Sensor	Full Resolution	Max Frame Rate @ Full Resolution	Minimum Illumination	Lens	H.264/MJPEG	True Day/Night	WDR	Binning Mode
AV12176DN-NL	3MP x 4 (12MP)	8192 x 1536 = 12MP	5.2fps	Color (Non-Binning): 0.5 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive	Sold Separately	*	*	*	*
AV12176DN-28	3MP x 4 (12MP)	8192 x 1536 = 12MP	5.2fps	Color (Non-Binning): 0.5 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive	M12, 2.8mm, 1/2.5", F1.8, Fixed Iris, H-FOV = 89°	*	*	*	*
AV12176DN-08	3MP x 4 (12MP)	8192 x 1536 = 12MP	5.2fps	Color (Non-Binning): 0.5 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive	M12, 8mm, 1/2.5", F1.6, Fixed Iris, H-FOV = 33°	*	*	*	*
AV20175DN-NL	5MP x 4 (20MP)	10240 x 1920 = 20MP	3.5fps	Color (Non-Binning): 0.3 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive	Sold Separately	*	*	*	*
AV20175DN-28	5MP x 4 (20MP)	10240 x 1920 = 20MP	3.5fps	Color (Non-Binning): 0.3 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive	M12, 2.8mm, 1/2.5", F1.8, Fixed Iris, H-FOV = 113°	*	*	*	*
AV20175DN-08	5MP x 4 (20MP)	10240 x 1920 = 20MP	3.5fps	Color (Non-Binning): 0.3 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive	M12, 8mm, 1/2.5", F1.6, Fixed Iris, H-FOV = 40°	*	*	*	*

## Options

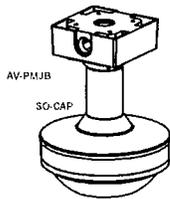
-NL	No Lenses (User Configurable and Ordered Separately)
-28	Configured with 2.8mm Lenses, typical for many 270° Corner Mount configurations
-08	Configured with 8mm Lenses, typical for many halfway intersections

**Arecont Vision**

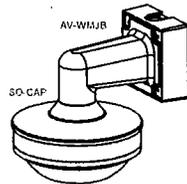
Leading the Way in Megapixel Video™

# Surround Video® Omni IP Megapixel Cameras

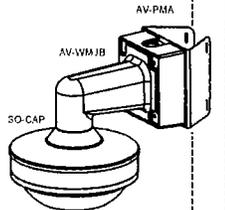
## Accessory Configurations



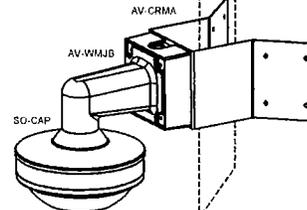
Ceiling Mount



Wall Mount



Pole Mount

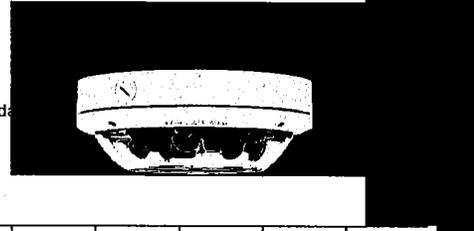


Corner Mount

## Accessories

SO-CAP Cap for SurroundVideo® Omni	
AV-WMJB Wall Mount Adapter with Junction Box	
AV-PMJB Pendant Mount Adapter with Junction Box	
AV-PMA Pole Mount Adapter	
AV-CRMA Corner Mount Adapter	
SV-EBA Electrical Box Adapter	

Surface Mount (Standard)



## Lens Options

Focal Length	2.8mm	4mm	6mm	8mm	12mm	16mm
F Stop	F1.8	F1.6	F1.6	F1.6	F1.6	F1.6
Horizontal FOV	3MP WDR	89	63	43	33	22
	5MP	113	80	55	40	28
Option	Standard (-28 Models)	Ordered Separately	Ordered Separately	Standard (-08 Models)	Ordered Separately	Ordered Separately
Part Number	MPM2.8	MPM4.0	MPM6.0	MPM8.0	MPM12.0	MPM16.0



## Global Sales and Support

Arecont Vision is the leading manufacturer of high-performance megapixel IP cameras and associated software.

### Americas

Los Angeles, CA, USA  
Arecont Vision, LLC, Headquarters  
425 E. Colorado St., 7th Floor  
Glendale, CA 91205, USA

Phone: +1.818.937.0700  
Toll Free: 877.CAMERA.8  
Fax: +1.818.937.0464

Sales  
Phone: +1.818.937.0700 x3  
Email: [avsales@arecontvision.com](mailto:avsales@arecontvision.com)

Support  
Phone: +1.818.937.0700 x1  
Email: [support@arecontvision.com](mailto:support@arecontvision.com)

Latin America  
Email: [latam.sales@arecontvision.com](mailto:latam.sales@arecontvision.com)

### EMEA

Düsseldorf, Germany  
Phone: +49.69.6953.4600  
Email: [europe.sales@arecontvision.com](mailto:europe.sales@arecontvision.com)

Moscow, Russia  
CJSC Arecont Vision  
Phone: +7.495.649.0577  
Fax: +7.495.221.5227  
Email: [info@arecontvision.ru](mailto:info@arecontvision.ru)

Middle East  
Email: [mena.sales@arecontvision.com](mailto:mena.sales@arecontvision.com)

Africa  
Email: [africa.sales@arecontvision.com](mailto:africa.sales@arecontvision.com)

### APAC

China  
Phone: +86.180.0179.1799  
Alt. Phone: +1.818.937.0700 x3  
Fax: +1.818.649.3404  
Email: [apac.sales@arecontvision.com](mailto:apac.sales@arecontvision.com)



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425 E. Colorado St. 7<sup>th</sup> Floor | Glendale, CA USA 91205 | +1.818.937.0700 | [www.arecontvision.com](http://www.arecontvision.com) | [avsales@arecontvision.com](mailto:avsales@arecontvision.com)

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Made in the USA