

# SpeedDome Ultra

## Outdoor Dome Housings

### Features That Make a Difference:

- Reinforced high impact design with vandal resistant option
- Stores presets and patterns within the base to eliminate reprogramming
- Four alarm inputs, one output
- Temperature-controlled interior environment
- Automatic defog and defrost heater cycle modes with manual heater on/off control
- On-demand menu displays housing temperature and humidity
- Thermostatically controlled heater and blower prevent excessive buildup of ice and remove any that does accumulate in one hour
- Meets IP66/NEMA 4 specifications
- Includes four tamper-proof screws and driver bit
- Surge and lightning protection of video, communications, alarm input and output, and power
- Plug and play connectors enable easy servicing of I/O board
- Internal LEDs and switches verify proper power and communication status
- Integrated Unshielded Twisted Pair (UTP) simplifies wiring and installation
- J-Boxes available to facilitate wiring of housing and dome
- Ceiling, pole, roof, wall and corner mounts available
- Recessed Outdoor Housing Mount



**ADSDUHO**  
Outdoor Dome Housing



**ADSDUHOVRC**  
Vandal Resistant Outdoor  
Dome Housing

The SpeedDome Ultra 8E outdoor housing allows SpeedDome Ultra 8E programmable dome cameras to be installed in virtually any environment. The housing has been designed to provide maximum protection to the internal camera in various weather conditions. In extreme temperatures, the housing's built-in thermostatically controlled heater and blower prevent excessive ice from forming on the outside bubble. In addition, you can manually activate a defog and defrost mode and even view the housing temperature and humidity. The housing is constructed with a reinforced fiberglass high impact polycarbonate material along with a UV stabilized sun shade, trim ring and top cover. The bubble assembly is affixed to the top via tamper-proof screws.

For applications where vandalism is a concern, a vandal resistant model is available which includes an aluminum sunshield cover and a high impact bubble which meets ANSI-87.1 impact safety standards. For additional protection a stainless steel bubble cage is also provided.

SpeedDome Ultra 8E programmable dome cameras are easy to install. Simply plug in the video cable, connect power and data, and the installation is complete. Power and communications LEDs provide diagnostics, confirm proper connections and aid in troubleshooting.

Presets, patterns and other parameters are stored in the housing's I/O board so if a dome has to be replaced, the programming is automatically downloaded to the new dome.

The housing is equipped with four alarm inputs and one alarm output and surge protection is provided to all video and external lines. The housing is available with your choice of a clear or smoked bubble and a variety of mounts make it easy for you to install it in nearly any application.

The recessed outdoor mount configuration allows the dome to be installed in outdoor in-ceiling installations. The new recessed outdoor mount option protects the camera dome against outdoor weather conditions and maintains the current SpeedDome Ultra 8E features and functions.

The mount installs easily into soffits and hard ceilings. The construction of the mount aids in keeping the dome protected in all weather conditions.

An optional end cap assembly is ideal for cable interconnection and with the use of third party fiber optic interfaces.

# Features

## ADSPOT Features & Specifications



- Single Position Outdoor Power Supply
- Supports both 120 VAC and 230 VAC
- Small, compact design
- Weatherproof design: NEMA 4 and IP66 rated
- Euro-style terminal blocks for quick and simple installation

### Mechanical

Dimensions (H x W x D) . . . .	75 x 125 x 75 mm (6.9 x 4.9 x 3.0 in)
Weight . . . . .	3.7 kg (8.2 lbs)
Enclosure Material . . . . .	Impact-resistant polycarbonate
Color . . . . .	Light gray
Wall Mounting Options . . . . .	Concrete, wood or sheet rock
Mounting Area (H x W) . . . . .	281 x 200 mm (11.1 x 7.9 in)
Cover Fasteners . . . . .	Four captive screws
Cable Access Knockouts . . . .	Eight 21 mm or 15.5 mm (0.83 in or 0.61 in) Four 29 mm or 23 mm (1.14 in or 0.91 in)

### Electrical

Power Source . . . . .	100-120 VAC or 200-240 VAC @ 50/60 Hz
Operational Limits . . . . .	90-135 VAC or 180-265 VAC @ 50/60 Hz
Input Current . . . . .	1.0 A/0.5 A
Output . . . . .	24 VAC, 2.5 A max.
UL Listed Class 2 Certified Limited Power Source	

### Environmental

Weatherproof Standard . . . .	NEMA 4, IP66
Operating Temperature . . . .	-40°C to 50°C (-40°F to 122°F)
Storage Temperature . . . . .	-40°C to 50°C (-40°F to 122°F)
Humidity . . . . .	0% to 95% RH (non-condensing)

### Regulatory

Safety . . . . .	UL 60950-1 CSA C22.2 No. 60950-1 EN60950-1 IEC 60950-1
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### Additional Accessories

Code/J-Box Options	
ADACSNETD . . . . .	Matrix Distribution Panel, SNET/ Manchester, no Power Supply
ADAC422D . . . . .	Distribution Panel, RS-422 Distribution Panel, no power supply
AD2091 . . . . .	Code Generator/Distributor,
AD Manchester, 120 V	
AD2091-1 . . . . .	Code Generator/Distributor,
AD Manchester, 230 V	
AD2083-02C . . . . .	Code Distributor, SEC RS-422, 120 V
AD2083-02C-1 . . . . .	Code Distributor, SEC RS-422, 230 V

RJ1SNUD . . . . .	J-Box, Indoor/Outdoor, 1-Position, SensorNet, 120 VAC
RJ1SNUD-1 . . . . .	J-Box, Indoor/Outdoor, 1-Position, SensorNet, 230 VAC
RJ856UD . . . . .	J-Box, Indoor/Outdoor, 1-Position, RS-422, 120 VAC
RJ856UD-1 . . . . .	J-Box, Indoor/Outdoor, 1-Position, RS-422, 230 VAC
RJ6SN <sup>1</sup> . . . . .	J-Box, Indoor 6-Position SensorNet 485, 120/230 VAC
RJ860AP <sup>2</sup> . . . . .	J-Box, Indoor 10-Position RS-422, 120 V
RJ860AP-1 <sup>2</sup> . . . . .	J-Box, Indoor 10-Position RS-422, 230 V

### Model Numbers

ADSDUHOC . . . . .	Housing with Integrated I/O Board and Clear Bubble (f0)
ADSDUHOVRC . . . . .	Vandal Resistant Housing with Integrated I/O Board and High Impact Clear Bubble (f0)
ADSDUHOS . . . . .	Housing with Integrated I/O Board and Smoked Bubble (f1.0)
ADSDUHOVRS . . . . .	Vandal Resistant Housing with Integrated I/O Board and High Impact Smoked Bubble (f1.0)
ADSDU8ERHC . . . . .	Dome-Recessed Housing - In/Outdoor

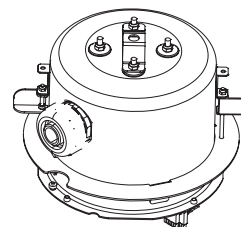
## Maximum Distances from Power Source

Dome and housing to be connected to a NEC Class 2, Certified Limited Power Source (LPS), 24 VAC, 80 VA power source (do not exceed maximum outdoor Class 2 ratings of 30 VAC, 100 VA).

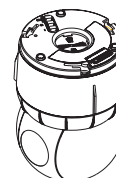
	18 AWG	16 AWG	14 AWG
Low Line Voltage 102/204 VAC	60 m (200 ft)	100 m (320 ft)	100 m (320 ft)
Low Line Voltage 90/180 VAC	30 m (100 ft)	50 m (160 ft)	80 m (260 ft)

## Compatible Housing/Eyeball Assemblies

SpeedDome Ultra Series



Integrated I/O board base  
provides for mechanical and  
electrical "quick connect" to  
SpeedDome Ultra  
housing/eyeball assembly



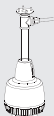
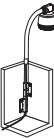




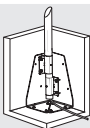

SpeedDome Ultra series  
housing/eyeball assembly

### Dome Installation

(typical)

(1) Supports up to 2 housings/domes.  
(2) Supports up to 5 housings/domes.

Outdoor Mounting Options						
Mount		Description	Compatibility	Construction	Dimensions	Weight
RHOSW: Short Wall Mount with End Cap Assembly		This mounting structure attaches directly to a flat wall. When used with the RHOWCA corner bracket adapter or RHOWPA pole strap adapter it can be affixed to corners as well as poles. A mounting cover conceals the mounting plate for a more attractive appearance.	SpeedDome Ultra Series	Powder-coated aluminum, ABS plastic and fiber-filled PVC	With dome installed 366 x 218 x 282 mm (14 x 9 x 11 in)	1.3 kg (3 lbs)
RHOLW: Long Wall Mount with End Cap Assembly		This mount attaches directly to a flat wall, positioning the dome away from the wall, so that it can see over furniture, shelving and displays. When used with the RHOWCA corner bracket adapter or RHOWPA pole strap adapter it can be affixed to corners as well as poles. A mounting cover conceals the mounting plate for a more attractive appearance.	SpeedDome Ultra Series	Powder-coated aluminum, ABS plastic and fiber-filled PVC	With dome installed 366 x 218 x 587 mm (14 x 9 x 23 in)	1.7 kg (3.9 lbs)
RHOPN: Outdoor Pendant Mount		This mount suspends an outdoor dome housing from an outdoor ceiling or horizontal surface. It can be installed using either new or existing 1.25" NPT threaded pipe or rigid conduit up to 3 meters (10 ft) in length.	SpeedDome Ultra Series	Powder-coated aluminum, ABS plastic	115 x 120 x 120 mm (4.5 x 5 x 5 in)	1.8 kg (4 lbs)
RHOTR: Over-the-Roof Mount with End Cap Assembly		This mount affixes directly to any wall, rooftop wall or parapet, positioning the dome away from the wall, so that it can see over awnings, soffits and landscaping. Opposing wing brackets secure installation to the roof surface, while allowing the pole to be repositioned for easy service access.	SpeedDome Ultra Series	Powder-coated aluminum, ABS plastic and fiber-filled PVC	1098 x 243 x 473 mm (43 x 10 x 19 in)	5.7 kg (12.7 lbs)

Outdoor Adapter Options						
Mount		Description	Compatibility	Construction	Dimensions	Weight
RHOWCA: Corner Bracket Adapter		This adapter attaches the long and short wall mounts (RHOSW & RHOLW) to affix to outside corners. Powder-coated aluminum construction ensures an extremely sturdy installation.	SpeedDome Ultra Series	Powder-coated aluminum	185 x 210 x 125 mm (7 x 8 x 5 in)	.79 kg (1.75 lbs)
RHOWPA: Pole Strap Adapter		This adapter attaches the long and short wall mounts (RHOSW & RHOLW) to outside corners. This kit contains stainless steel straps that can be daisy-chained to accommodate any size pole and all the necessary mounting hardware.	SpeedDome Ultra Series	Powder-coated aluminum and stainless steel	138 x 79 x 27 mm (5 x 3 x 1 in) Straps support 53 to 951 mm (2 to 30 in) pole diameter	.5 kg (1.1 lbs)
ROTRF: Floor Adapter for RHOTR		This adapter installs the RHOTR over-the-roof mount on horizontal and vertical roof/parapet surfaces. Multiple fastening positions provide versatility for mounting on any combination of surfaces and angles.	SpeedDome Ultra Series	Powder-coated aluminum	369 x 240 x 240 mm (15 x 10 x 10 in)	2.59 kg (5.75 lbs)
ROENDC: End Cap Assembly		This mounting assembly retrofits any existing outdoor SpeedDome wall, pole, corner, or over-the-roof mount to accommodate newer outdoor housings. A modular design lets you mount the housing to the end cap on the ground, before installing it on the mounting pole, making the process safe and easy.	SpeedDome Ultra Series	Fiber-filled PVC	64 x 103 x 194 mm (3 x 4 x 8 in)	.32 kg (.7 lbs)

ADSDUHC, ADSDUHOS		ADSDUHOVRC, ADSDUHOVRS (Vandal Resistant)
Mechanical		
Sun Shade & Trim Ring	Aluminum	UV stabilized, polycarbonate
Bubble	Acrylic	High impact acrylic
Bubble Cage	N/A	Stainless steel, painted flat black
Weight		
Without Dome	2.06 kg (4.54 lbs)	2.8 kg (6.17 lbs)
With Dome	3.15 kg (6.95 lbs)	3.86 kg (6.07 lbs)
Shipping Weight of Housing	3.45 kg (7.61 lbs)	4.16 kg (9.17 lbs)

Model	Description
ADSDU8ERHC	Dome Housing, Recessed Ceiling Mount, Indoor/Outdoor, SDU, I/O Board, Clear Bubble
ADSDU8ERHS	Dome Housing, Recessed Ceiling Mount, Indoor/Outdoor, SDU, I/O Board, Smoked Bubble
ADSDU8ERHVC	Dome Housing, Recessed Ceiling Mount, Indoor/Outdoor, SDU, I/O Board, Vandal Clear Bubble
ADSDU8ERHVS	Dome Housing, Recessed Ceiling Mount, Indoor/Outdoor, SDU, I/O Board, Vandal Tinted Bubble

## Common Specifications for SpeedDome Ultra Outdoor Dome Housings

### Electrical (Combined Dome and Housing)

Voltage	24 to 30 VAC, 50/60 Hz
Power	80 W maximum
Power-on In-rush Current	3 A
Video Surge Protection	Series Resistor of 3.9 ohms; Low Capacitance TVS with Peak Power Rating of 300 W at 8/20 $\mu$ s; 5 kA (8/20 $\mu$ s impulse discharge) Gas Discharge tube
Manchester/SensorNet	Isolation transformer 2000 Vrms; PTC resettable fuse; Low Capacitance TVS rated at 5.6 VDC, 40 A, 0.1 J, (8/20 $\mu$ s impulse discharge current); Gas Discharge tube rated at 5 kA (8/20 $\mu$ s impulse discharge current)
RS-422	Series resistors of 3.9 ohms; Low Capacitance TVS rated at 5.6 VDC, 40 A, 0.1 J, (8/20 $\mu$ s impulse discharge current); Gas discharge tube impulse rated at 5 kA (8/20 $\mu$ s impulse discharge current)
Alarm Input Surge Protection	Low Capacitance TVS with Peak Pulse Current of 17 A max and Peak Pulse Power of 300 W (8/20 $\mu$ s impulse discharge current)
Power Line	Gas discharge tube impulse rated at 5 kA (8/20 $\mu$ s impulse discharge current); TVS rated at 60 VDC, 250 A, 1.5 J
Auxiliary Output	One Relay 2FC Contact Arrangement with initial isolation resistance of 1,000 Mohms @ 500 VDC. The relay contact rating is 30 VDC, 1 A, or 125 VAC, 0.3 A

### Mechanical

Construction Enclosure	Aluminum
Sun Shade and Trim Ring	UV stabilized, polycarbonate
Color	Light gray
Height	321 mm (12.64 in)
Diameter	244 mm (9.61 in)
Bubble Diameter	75.3 mm (6.93 in) High Impact Acrylic
Mechanical Connection	1.5 in NPT

### Connectors (on Integrated I/O Board)

Video Output	Female BNC video cable
Manchester/SensorNet	Plug in dual row header with ejector RS-422
Alarm Inputs/Auxiliary Output	Plug in dual row header with ejector Unshielded Twisted
Pair Video	Plug in dual row header with ejector
Power	Plug in 3.5mm vertical header
Normally Closed (NC)	- pin 1
Common (C)	- pin 2
Normally Open (NO)	- pin 3
I/O Connector	Spring contact gold fingers for mate with SpeedDome Ultra housing/eyeball assemblies

### Environmental

Weatherproof Standard	NEMA 4/IP66
Operating Temperature	-40°C to 50°C (-40°F to 122°F)
Humidity	0 to 95% RH (non-condensing)
Storage Temperature	-40°C to 50°C (-40°F to 122°F)
Wind Loading	Sustained winds of 240 km/hour (150 miles/hour) when properly installed and mounted (wall, pole, ceiling, and over-the-roof mount with proper support)

### Regulatory

Emissions	FCC: 47 CFR Part 15, Subpart B Class A CE: EN5502 Class B CE: EN6100-3-2 AS/NZS 3548, Class A CISPR22 ICES-003
Immunity	CE: EN50130-4 UL 60950-1
Safety	CSA 22.2 60950-1 EN 60950-1 IEC 60950-1

## Related Products



SpeedDome  
Ultra



SpeedDome  
Ultra 8E



Intellex

## Approvals

