**RH0DUL-03E
Outdoor Dome Housing**

**RH0DUL-03VRE
Outdoor Dome Housing**

AMERICAN DYNAMICS™

SpeedDome® Ultra
OUTDOOR DOME HOUSING

The SpeedDome Ultra outdoor housing allows the SpeedDome Ultra dome to be installed in virtually any environment. The housing is temperature controlled and weather proof, protecting the dome from a wide range of outside temperatures. In extreme temperatures, the housing's built-in thermostat and heater prevents ice from forming on the outside bubble. In addition to the thermostatically controlled heater and blower, you can even manually activate a defog and defrost mode using your American Dynamics controller. The housing is made of 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 provided.

Simply plug in the video cable, connect power and data, and install any SpeedDome Ultra. Diagnostic power and communications LEDs confirm proper connection and aid in troubleshooting. A variety of mounts accommodate the housing, making it easy to install.

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 supplied with a choice of either clear or smoked bubble.

FEATURES

- **NEW** Four alarm inputs, one output
- **NEW** On demand defog and defrost heater cycle modes
- **NEW** Reinforced high impact design
- **NEW** Vandal resistant option
- Temperature-controlled interior environment
- Meets IP66 /NEMA 4 specifications
- Class 2 LPS certified
- Four tamper-proof screws with driver bit supplied
- Surge and lightning protection of video, communications, alarm input and output, and power

- Ceiling, pole, roof, wall and corner mounts available
- Flying lead connector with Euro-style screw terminal
- Allows daisy chain configuration of control wiring
- J-Boxes available to facilitate wiring of housing and dome
- Prevents and removes accumulated ice in one hour
- Internal LEDs and switches verify proper power and communication status

tyco / Fire & Security

SPECIFICATIONS

Model Numbers

RHODUL-03E . . . . .Housing with Integrated I/O board and Clear Bubble ($f0$)

RHODUL-03VRE . . . . .Vandal Resistant Housing with Integrated I/O Board and High Impact Clear Bubble ($f0$)

RHODUL-04E . . . . .Housing with Integrated I/O Board and Smoked Bubble ($f1.0$)

RHODUL-04VRE . . . . .Vandal Resistant Housing with Integrated I/O Base and High Impact Smoked Bubble ($f1.0$)

Electrical (combined dome and housing)

Voltage . . . . .20 to 36 VAC, 50/60 Hz
Power . . . . .80 watts, maximum
Power-on In-rush Current . . . . . .3 A
Surge Protection
  Video . . . . .Series resistor of 3.9 Ω; low-capacitance Zener suppressor of 6.5 V, 1500 watts, 500 watts, 8/20 µsec impulse, 500 watts, 10 kA impulse rated gas tube
  Manchester/SensorNet . . . . . . .Isolation transformer coupled, 2000 Vrms; PTC resettable fuse protects transformer; TVS rated at 5.6 V, 40 A, 0.1 joules, 8/20 µsec impulse, 500 watts, 10 kA impulse rated gas tube
  RS-422 .Series resistors of 33 Ω; TVS rated at 5.6 V, 40 A, 0.1 joules, 8/20 µsec impulse, 500 watts, 10kA impulse rated gas tube
  Alarm Input . . . . .Series resistors of 33 Ω; TVS rated at 5.6 V, 40 A, 0.1 joules, 8/20 µsec impulse, 500 watts, 10 kA impulse rated gas tube
  Power Line . . . . .TVS rated at 60 V, 250 A, 1.5 joules, 8/20 µsec impulse, 500 watts, 10 kA impulse rated gas tube
  Auxiliary Output . . . . .1000 V isolation Form 1-C relay

Mechanical

RHODUL-03E, RHODUL-04E
Construction
  Enclosure . . . . .Aluminum
  Sun Shade, Trim Ring,
    Top Cover . . . . .UV stabilized, polycarbonate
Color . . . . .Light gray
Height . . . . .321 mm (12.64 in)
Diameter .244 mm (9.61 in)
Bubble . . . . .Acrylic
Bubble Diameter . . . . .75.3 mm (6.93 in)
Weight
  Without Dome . . . . .2.6 kg (5.72 lbs)
  With Dome . . . . .3.8 kg (8.36 lbs)
Shipping Weight of Housing . . .3.3 kg (7.26 lbs)
Mechanical Connection . . . . . . .1.5 in NPT

RHODUL-03VRE, RHODUL-04VRE
Construction
  Enclosure . . . . .Aluminum
  Sun Shade, Trim Ring,
    Top Cover . . . . .UV stabilized, polycarbonate
  Sun Shade Cover . . . . .Aluminum with high gloss power coating
Color . . . . .Light gray
Height . . . . .321 mm (12.64 in)
Diameter .244 mm (9.61 in)
Bubble . . . . .High impact acrylic
Bubble Diameter . . . . .75.3 mm (6.93 in)
Bubble Cage . . . . .Stainless steel, painted flat black
Height . . . . .87.7 mm

Width . . . . .212 mm
Weight
  Without Dome . . . . .2.75 kg (6.06 lbs)
  With Dome . . . . .3.95 kg (8.36 lbs)
Shipping Weight of Housing . . .3.45 kg (7.61 lbs)
Mechanical Connection . . . . . . .1.5 inch NPT

Maximum Distances From Power Source

Dome and housing to be connected to a Class 2 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)	160 m (520 ft)
Low Line Voltage 90/180 VAC	30 m (100 ft)	50 m (160 ft)	80 m (260 ft)

Connectors (on integrated I/O board)

Manchester/SensorNet . . . . .Two-position 3.5 mm Euro-style terminal block
Video Output . . . . .Female BNC
RS-422 . . . . .Four-position 3.5 mm Euro-style terminal block
Alarm Input . . . . .Six-position 3.5 mm Euro-style terminal block
Relay Contact Output . . . . .Three-position 3.5 mm Euro-style terminal block
                         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° to 50° C (-40° to 122° F)
Humidity .0 to 95% RH (non-condensing)
Storage Temperature . . . .-10° to 50° C (14° 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: EN55022 Class B
                         CE: EN6100-3-2
                         CE: EN6100-3-3
                         AS/NZS 3548, Class A
                         CISPR22
                         ICES-003
Immunity . . . . .CE: EN50130-4
Safety . . . . .UL: UL1950
                         cUL: CSA 22.2 No. 950
                         CE: EN60950
                         IEC950

Accessories

Code/J-Box Options
AD1691 . . . . .Code Distributor, AD Manchester, 120 V
AD1691F-1 . . . . .Code Distributor, AD Manchester, 230 V
AD2091 . . . . .Code Generator/Distributor,
                        AD Manchester, 120 V
AD2091-1 .Code Generator/Distributor,
                        AD Manchester, 230 V
AD2083-02B . . . . .Code Distributor, SEC RS-422, 120 V
AD2083-02B-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* . . . . .J-Box, Indoor 6-Position SensorNet 485,
                        120/230 VAC
RJ860AP** . . . . .J-Box, Indoor 10-Position RS-422, 120 V
RJ860AP-1** . . . . .J-Box, Indoor 10-Position RS-422, 230 V
  * Supports up to 2 housings/domes
  ** Supports up to 5 housings/domes

Compatible Housing/Eyeball Assemblies
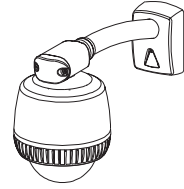
SpeedDome Ultra Series

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

SpeedDome Ultra series
housing/eyeball assembly
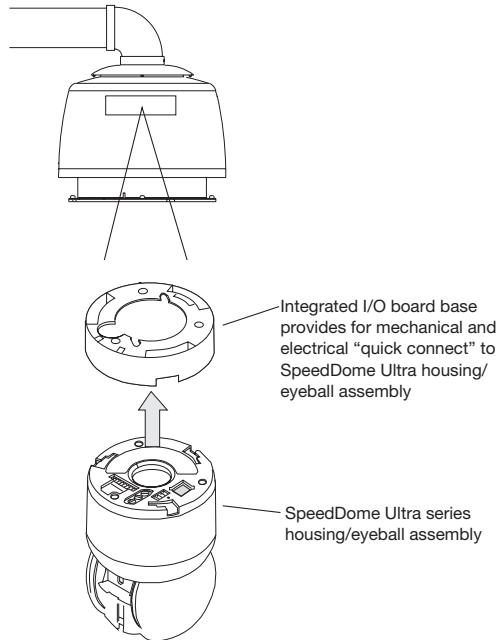
Dome Installation
(typical)

Mounts and Adapters
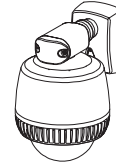
RHOSW
Indoor/Outdoor
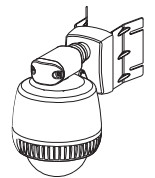Short wall mount
with end cap assembly

RHOLW
Indoor/Outdoor
Long wall mount
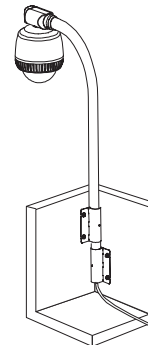with end cap assembly

RHOPN
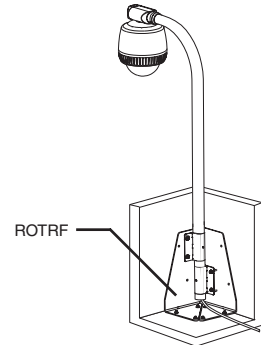Outdoor pendant mount

RHOWPA
Indoor/Outdoor Pole
strap adapter for
RHOSW and
RHOLW

RHOWCA
Indoor/Outdoor Corner
bracket adapter for
RHOSW and
RHOLW

RHOTR
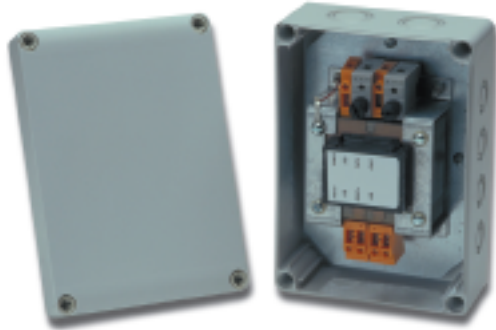Outdoor Over-the-roof
mount with end cap
assembly

ROTRF

ROTRF
Outdoor Floor adapter
for RHOTR

Additional Accessory

ADSPOT . . . . .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 make for quick and simple installation

Model Number

ADSPOT . . . . .240 VAC (field changeable to 120 VAC)
Transformer jumpers are field changeable to support either 120 VAC or 240 VAC.

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 1.0A/0.5A
Output . . . . .24 VAC, 2.5A max.
UL Listed Class 2
Certified Limited Power Source

Mechanical

Dimensions (H x W x D) . . . . . . .175 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)

Environmental

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

Regulatory

Safety . . . . .UL 60950
CSA C22.2 No. 60950
EN60950
IEC 60950