



S2000-MSH Surveyor2000 Impact-Resistant Maximum Security Housing

- **Rugged housing and lower polycarbonate dome offer maximum security protection**
- **Polycarbonate lower dome provides impact resistance**
- **Uses dependable Surveyor2000 Camera Dome drive**
- **Wall or ceiling mounts available**

The S2000-MSH is a heavy-duty, impact-resistant housing designed for Vicon's Surveyor2000 Camera Dome drive. The exte-

rior housing and mounts are formed, heavy-gauge steel assemblies that provide exceptional protection against tampering and vandalism. The wall and ceiling mount brackets have mounting holes and a passage hole for cabling. In addition, they provide a tilt adjustment for planes just out of vertical. The housing has a passage hole for cables and uses a liquid-tight conduit fitting for sealing. The housing is also equipped with a steel trim ring and tamperproof hardware. Inside the housing is a three-standoff mount used to connect the Surveyor2000 Camera Dome drive assembly. The lower dome is fabricated from high-impact polycarbonate for superior protection against vandalism.

Note: Refer to the Surveyor2000 Product Specification (V031) for technical information on the Surveyor2000 Camera Dome.

ASSOCIATED EQUIPMENT AND ACCESSORIES

Model S2000-MSH-WM Wall Mount, product code 7620: Allows the S2000-MSH to be wall mounted.

Model S2000-MSH-CM Ceiling Mount, product code 7619: Allows the S2000-MSH to be ceiling mounted.

Model V22PA Pole Mount Adapter, product code 1931: Allows the S2000-MSH-WM to be pole mounted. See Product Specification 532.

Model	Product Code	Description
S2000-RW23-MSH	7554-00	1/4-in. color camera, NTSC version, 23x zoom, high resolution day/night camera, lower polycarbonate dome, mounting bracket not included.
S2000-RW23C-MSH	7554-01	1/4-in. color camera, PAL version, 23x zoom, high resolution day/night camera, lower polycarbonate dome, mounting bracket not included.
S2000-CW22-MSH	7464-00	1/4-in. color camera, NTSC version, 22x zoom, high resolution camera, lower polycarbonate dome, mounting bracket not included.
S2000-CW22C-MSH	7464-01	1/4-in. color camera, PAL version, 22x zoom, high resolution camera, lower polycarbonate dome, mounting bracket not included.
S2000-MW22-MSH	7615-00	1/4-in. monochrome camera, EIA version, 22x zoom, high resolution camera, lower polycarbonate dome, mounting bracket not included.
S2000-MW22C-MSH	7615-01	1/4-in. monochrome camera, CCIR version, 22x zoom, high resolution camera, lower polycarbonate dome, mounting bracket not included.

Table 1: Models, Product Codes and Descriptions

Contractors' Specification

Impact-Resistant Maximum Security Housing

The maximum security housing shall be an alternate mount configuration for a compact camera dome system. It shall be a completely self-enclosed, heavy-duty housing with choice of a wall or ceiling mount. It shall provide ultimate security protection for the camera dome with respect to theft and tampering. In addition, it shall offer excellent environmental protection. The housing shall be constructed of 13 gauge welded steel painted in a gray color and provide a lower dome constructed from impact-resistant polycarbonate. The housing shall be mountable in two (2) configurations, with a wall mount or ceiling mount. Both mounts shall be constructed of 0.19 in. (4.8 mm) thick steel painted gray and utilize a hole pattern for mounting. In addition, both mounts shall provide a mechanical tilt adjustment for leveling on untrue surfaces. The camera dome assembly shall be installed into the housing using a three (3) standoff pattern and attached to the housing with an additional safety cord for convenience of installation and servicing. The lower dome shall be attached using tamperproof hardware and removable with provided tools. The housing shall have a passage hole for cables and utilize a provided liquid-tight conduit fitting for water ingress prevention.

The maximum security housing shall be designed in accordance with safety standard UL2204 and CSA C22.2, No. 1, European Community (CE) Standards EN 50081-1 and EN 50082-1, and IP 65.

The housing dimensions shall be 11.8 inches (300 mm) wide, 9.8 inches (249 mm) high and 11.7 inches (297 mm) deep. With the wall mount it shall be 12.2 inches (310 mm) wide, 9.8 inches (249 mm) high and 14.6 inches (371 mm) deep. With the ceiling mount it shall be 12.2 inches (310 mm) wide, 10.9 inches (277 mm) high and 11.7 inches (297 mm) deep. The maximum security housing shall weigh 11.5 lb (5.2 kg) and 15.0 lb (6.8 kg) with the drive installed. It shall have sufficient strength to support the camera dome system in winds up to 80 mph. The maximum security housing for Vicon's Surveyor2000 shall be Vicon's model S2000-MSH Series. (Refer to Table 1) The wall mount shall be Vicon's model S2000-MSH-WM and the ceiling mount shall be Vicon's model S2000-MSH-CM.

Technical Information

ELECTRICAL

(Surveyor2000 Camera Dome drive only)

Drive Type: Electrical motorized pan and tilt with electronic control.

Camera Types: Units available in high resolution monochrome or color, and EIA, CCIR, NTSC or PAL.

Input Voltage: 22 - 34 VAC.

Current: 2.0 A.

Power Consumption: 48.0 watts nominal.

Heat Equivalent: 4.7 btu/min (1.2 kg-cal/min).

Note: These figures represent the conversion of 100% of the electrical energy to heat. Actual percentage of the heat generated will be less and will vary from product to product. These figures are provided as an aid in determining the extent of cooling required for an installation.

Connector Types: Video: BNC-F.
Power: screw terminal block, 3 position.
Control Input/Output: removable screw terminal block, 5 position.
Relay Output: RJ-45 connector.
Alarm Input: RJ-45 connector.

Video Input Impedance: 75 ohms.

Fuse: F1: 2AG, 1.6 amp 250 VAC, slo-blo.
F1: 2AG, 2.5 amp 250 VAC, slo-blo.

Radio Frequency

Emission Rating: FCC Class A.

Safety Standard: UL2204.

CSA C22.2, No. 1.

European Community

(CE) Standards: EN 50081-1 generic emissions.
EN 50082-1 generic immunity.

OPERATIONAL

(Surveyor2000 Camera Dome drive only)

Pan Speed: Variable, 1 - 370°/sec.

Autopan Speed: Variable, 3 - 45°/sec.

Tilt Speed: Variable, 1 - 120°/sec.

Zoom Speed: Variable, 0 - 200°/sec.

Focus Speed: Less than 1.8 sec from end to end.

Preset Capabilities: 79 individual programmable preset positions.

Tour Capabilities: 8 tours available with 32 programmable events per tour. Events may be preset positions, alarm acknowledgment, alarm or preset dwell times, relay function activation, tour repeat or chaining tours.

Autotour Capabilities: 2 autotours available with 360 pan, tilt and zoom functions per autotour. Programming is done in real time with joystick and push buttons.

Preset Solving Speed: 1 sec nominal.

Preset Repeatability: 0.3° maximum.

Alarm Capabilities: 4 alarm inputs.

Individual input enable/ disable.

Alarm report to CPU enable/disable.

Technical Information (cont'd)

Active level definition (high/low).
Alarm acknowledge definition (manual or automatic) with programmable dwell time.

Alarm action definition (preset solve, relay on/off, tour, autotour, or no action).

Alarm titling.

Relay Capabilities: 1 relay output.

Power-on state definition (on/off).

Output type definition (momentary or latching).

Relay function status titling.

Control Hardware: Vicon's NOVA V1422 Matrix Switcher, V1300, V1344 and V1466 series NOVA CPUs, V1400X-DVC-G System Console and V1300X-DVC desk-mounted or V1300X-RVC rack-mounted keypad .

Control Software: Vicon's ProTech® software (or compatible) run on a standard PC type computer with an RS-422/485 half duplex protocol interface.

Control Format: RS-422 or RS-485 protocol selectable via DIP switch 2. Communication is simplex or half-duplex operation at 4800, 9600 or 19,200 baud or Vicon's enhanced Vicoax II protocol (superimposed data on composite video signal) automatically detected upon power up. RS-485 protocol utilizes full tristate outputs for daisy chain (bus) capability.

Control Display: On-screen, menu driven system allowing full configuration of the dome.

Screen Titling Capabilities: Programmable for Camera, Preset, Sector and Alarms. Fixed for Relay Function and Lens Status.
(Camera: 1 for each).
(Preset: 79 maximum).
(Sector: 16 maximum).
(Alarm: 4 maximum).
Individual type enable/disable.
20 characters maximum.
Selectable position.

MECHANICAL

Application: Indoor or outdoor.

Mounting: Wall or ceiling mount with separately purchased mounting brackets.

Cable Access: 0.88 in. (22 mm) hole size utilizing provided 0.5 in. (12.7 mm) liquid-tight conduit fitting.

Mounting Pattern: 4 threaded hole pattern on each mount sized to accommodate 3/8 in. (9.5 mm) hardware.

Dimensions:

Configuration	Width (in./mm)	Height (in./mm)	Depth (in./mm)
Housing Alone	11.8/(300)	9.8/(249)	11.7/(297)
Wall Mount	12.2/(310)	10.0/(254)	14.6/(371)
Ceiling Mount	12.2/(310)	10.9/(277)	11.7/(297)

Weight: S2000-MSH:
11.5 lb (5.2 kg).
15.0 lb (6.8 kg) with Surveyor2000 included.
S2000-MSH-WM: 11.75 lb (5.3 kg)
S2000-MSH-CM: 9.5 lb (4.3 kg)

Construction : Housing: 13 gauge (0.89 in./23 mm thick) welded steel.
Mount: 0.19 in. (4.8 mm) thick steel.
Lower Dome: impact-resistant polycarbonate material.

Finish: Paint.

Color: Gray.

Shipping Dimensions: Height: 12.0 in. (304 mm)
Width: 13.75 in. (349 mm.)
Length: 18 in. (457 mm)

Shipping Weight: 13.3 lb (6.0 kg).

Shipping Volume: 1.7ft³ (0.45m³).

ENVIRONMENTAL

Operating Temperature Range: -30° F to 122° F (-22° C to 50° C) maximum.

Operating Humidity Range: Up to 100% relative humidity, noncondensing.

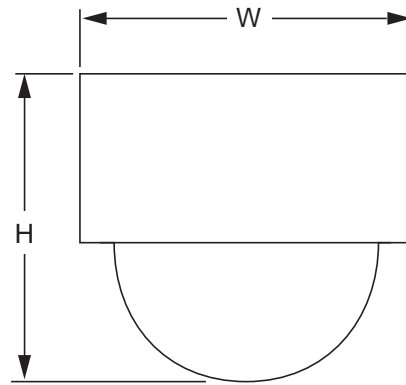
Storage Temperature Range: -40° F to 150° F (-40° C to 65° C) maximum.

Storage Humidity Range: Up to 100% relative humidity, noncondensing.

Ingress Protection: IP 65 rated.

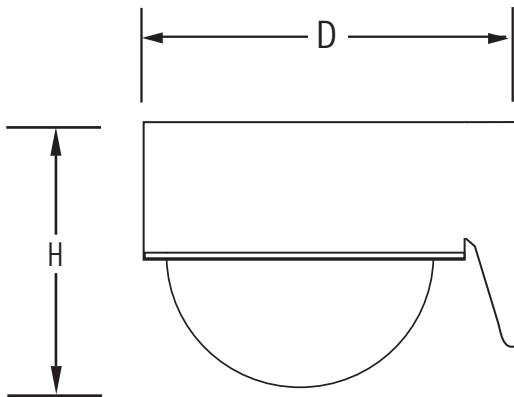
Tamper Protection: Tamperproof stainless steel hardware provided for lower dome and mounts, removed with provided removal tools.

HOUSING



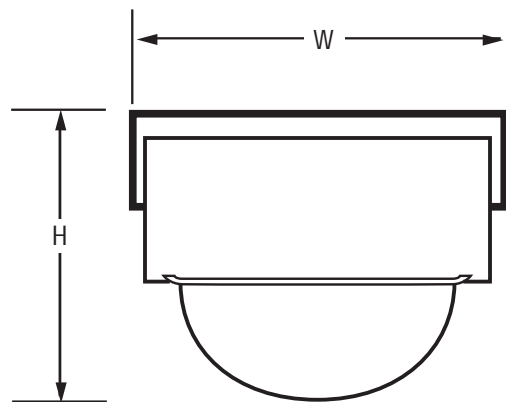
S-2000-MSH

WALL MOUNT



S2000-MSH-WM

CEILING MOUNT



S2000-MSH-CM