S10-CH Mini Camera Dome

- **10X optical zoom and 10X digital zoom combine for 100X zoom capability**
- **Indoor applications; aluminum housing and polycarbonate lower dome (IP66)**
- **Intelligent pan/tilt function keeps pan and tilt speeds in proportion to zoom**
- **Quick operation keys for ease of use**
- **Up to 79 programmable presets**
- **Up to 8 programmable tours**
- **Up to 8 user-defined patterns (autotours)**
- **Up to 4 programmable privacy masking zones**
- **4 alarm inputs activate with presets, tours or patterns**
- **Titling functions**
- **Password protection**
- **360° continuous rotation pan-and-tilt drive**
- **200°/sec pan preset speed; 150°/sec tilt preset speed**
- **Image stabilization provides absolute preset position**
- **Digital Slow Shutter feature for enhanced low-light applications**
- **Integral 3.8-38 mm autoiris varifocal lens**

The S10-CH is a compact, lightweight intelligent security device comprised of a color camera and lens with DSS (Digital Slow Shutter), pan/tilt drive, receiver and CPU-based electronics all in an attractive enclosure. The S10-CH can be programmed and operated using any V1300X/V1400X/1500 series NOVA communication devices. The S10-CH can be used for indoor installations. Its compact size makes it suitable for almost any application, including shopping malls or airports.

The S10-CH provides video transmission over coaxial cable. The camera has an integral 3.8-38 mm autoiris varifocal lens. The camera provides 10X optical zoom combined with 10X digital zoom capability, for a total of 100X zoom functionality. The dome also provides 360° continuous rotation. In preset mode, the unit has a pan speed of 200°/sec and a tilt speed of 150°/sec with ±0.2° system accuracy. The unit offers 0.2°/sec - 150°/sec pan and tilt manual speed adjustable in 10°/sec increments. Pan and tilt speeds adjust in proportion to the zoom function. It also provides an image stabilization function that minimizes the appearance of shaky images caused by low-frequency vibration, wind and impact.

The dome offers up to 79 programmable preset positions. Up to 8 user-defined patterns (autotours) can be programmed; up to 8 tours can be created, each tour consisting of up to 60 preset steps with individual speed and dwell times. Up to 8 sectors can be user-defined and programmed as well as 4 privacy mask zones. Four alarm inputs are available to activate with presets, tours or patterns. Password protection is available through the Vicon system. The unit functions in simplex mode. The S10-CH provides Quick Operation Keys (macros) for ease of operation for certain functions.

The S10-CH is designed to be surface-mounted. A pendant mount adapter is included so the dome can be mounted in a pendant configuration with an appropriate mount. The unit is compatible with Vicon's line of SurveyorVFT mounting options for wall, ceiling or pendant configurations. An option to mount the unit in a dropped ceiling is available. Refer to Table 1 for a complete listing.

The S10-CH meets requirements for an FCC Class A computing device.

Table 1: Models, Product Codes and Descriptions

Models Number	Product Code	Description
S10-CH	9151-00	Camera dome with 10X optical zoom and 10X digital zoom, indoor applications, color camera , NTSC
S10-CH-C	9151-01	Camera dome with 10X optical zoom and 10X digital zoom, indoor applications, color camera , PAL
S-10CM	9151-20	Dropped-ceiling mount; used to mount the S10-CH into a dropped ceiling
S-10PA	9151-10	Pendant mount adapter for use with an appropriate mount (included)
SVFT-UWM	8352-00	Wall mount, used to mount the S10-CH to a wall
SVFT-WM	8350-00	Wall mount (short), used to mount the S10-CH to a wall
SVFT-UCM	8351-00	Ceiling mount, used to mount the S10-CH to a ceiling
SVFT-UPM-1	8348-10	Parapet mount, used to mount the S10-CH to the inside surface of a roof parapet or similar structure
SVFT-URM-1	8349-10	Roof mount, used to mount the S10-CH to a roof
V24CMB	1971-00	Corner mounting bracket; for use with wall mount for corner installation
V20B-A	3691-11	Pole mount adapter; used to mount S10-CH to a 4-10 in. diameter pole

ELECTRICAL

Motor Type: Stepper motor, various micro steps.

Input Voltage: 24 VAC.

Maximum Current: 650 mA.

Power Consumption: 16 W.

Heat Equivalent: 0.9 btu/min (0.23 kg-cal/min). Note: These figures represent the conversion of 100% of the electrical energy to heat. Actual percentage of 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 Out: screw terminal block. Power: screw terminal block. RS-485/422: screw terminal block. Alarms: screw terminal block.

Polyswitch: 1.1 A.

Video Output Impedance: Composite video, 75 ohm terminated.

Radio Emission Rating: FCC Class A/CE.

OPERATIONAL

Video Pan View: 360° continuous rotation.

Video Tilt View: -2° - 90°

Pan Speed: Preset: 200°/sec max. Manual: 0.2-150°/sec, adjustable in 10° increments.

Tilt Speed: Preset: 150°/sec max. Manual: 0.2-150°/sec, adjustable in 10° increments.

Autoscan Speed: Variable, 0.05 to 35°/sec; continuous rotation is on/off selectable. Movement is programmable clockwise or counterclockwise

Zoom Speed: Fast or slow, selectable.

Sectoring: 8 selectable, titling capabilities up to 16 characters.

Preset Capabilities: 79 individual programmable preset positions with titling capability up to 16 characters.

Preset Solving Speed: Less than 2 sec nominal.

System Accuracy (Pan & Tilt): ±0.2°.

Pan/Tilt Control: Pan and tilt speed adjust in proportion to zoom.

Tour Capabilities: 8 programmable tours, 60 programmable steps per tour, with titling capability up to 16 characters. Steps may be preset positions with individual speeds and dwell times.
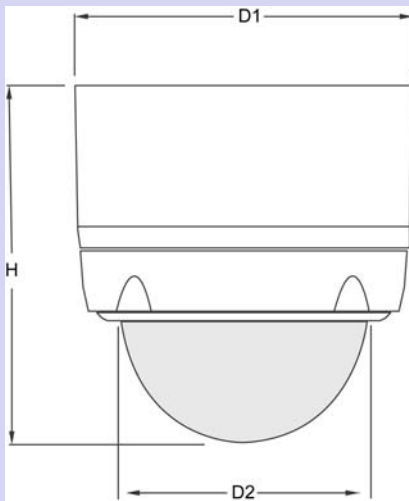
Autotour(Pattern) Capabilities: 8 autotours available with titling capability up to 16 characters.

Alarm Capabilities: 4 alarm inputs, individually programmable, NO/NC. Functional state enable/disable. Set action (preset solve, tour, pattern/autotour).

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

Privacy Masks: 4 individual, programmable for size and location.

Auto Flip: Programmable ON/OFF.

Password Protection: Available through Vicon system.

Screen Titling Capabilities: Programmable for camera, preset, sector, tour, pattern and privacy mask. 16 characters.

Multilanguage Menu: English, French, Italian and Polish.

Baud Rate: DIP switch selectable; 2400/4800 or 9600 bps baud rates supported.

Competitive Protocols: DIP switch selectable.

Control Protocol Hardware: Vicon: Vicon's NOVA V1422 Matrix Switcher, V1300, V1344, V1466, V1400 and 1500 series NOVA CPUs, V1400X-DVC System Console and V1300X-DVC desk-top keypad or V1300X-RVC rack-mounted keypad.

Control Protocol Format: (See Note on Competitive Protocols) Vicon: RS-485/422 protocol. Communication is simplex operation at 4800 baud automatically detected upon power up. RS-485/422 protocol utilizes full tri-state outputs for daisy chain capability. Pelco/Samsung: Pelco D/P Protocol (3/2/99); RS-485 N.8.1, simplex 2400 bps.

CAMERA

Camera Type: Color camera (NTSC/PAL formats) with 10X optical zoom, 10X digital; 1/4-inch Sony Super HAD CCD.

Camera/Lens Specifications: See Table 2.

| **Vicon Product Facts** | FC CE | **Model No: S10-CH Series** | **Product Code: See Table 1** | **SEC: 3** | **SPEC: V183** | **REV: 1107** | 3 |

Note: Pelco is a registered trademark of Pelco. Samsung is a registered trademark of Samsung Electronics Co. Ltd.

MECHANICAL

Application: Indoor.

Mounting: In-ceiling or surface mounted. Several mounting options. See Table 1 for compatible Vicon mounts.

Pendant Mount Size/Thread: Standard 3/4 inch male NPT pipe thread or metric equivalent.

Dimensions: Diameter (D1): 6.6 in. (167 mm). Height (H): 6.2 in. (157 mm). Lower Dome Diameter (D2): 3.9 in. (100 mm).

Weight: 3.3 lb (1.5 kg).

Construction: Die-cast aluminum; polycarbonate anti-vandal dome.

Color: Off-white housing; clear lower dome.

Shipping Dimensions: Height: 8.9 in. (226 mm). Width: 8.0 in. (203 mm). Depth: 8.0 in. (203 mm).

Shipping Weight: 3.75 lb (1.7 kg).

Shipping Volume: 0.3 ft^3 (0.008 m^3).

ENVIRONMENTAL

Operating Temperature Range: 14 to 122° F (-10 to 50° C).

Operating Humidity Range: 90% relative, noncondensing.

Storage Temperature Range: 14 to 140° F (-10 to 60° C).

Storage Humidity Range: 0 to 90% relative, non-condensing.

IP Rating: IP66.

Note on Competitive Protocols: All companies make changes and improvements in their products. Because this product can interface with equipment not manufactured by Vicon, there is a possibility that the interface protocols may have changed since Vicon tested this product with the interfacing equipment. Vicon recommends purchasing a single unit for bench testing prior to purchasing and installing this product in quantity.

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Vicon Product Facts FC CE | **Model No: S10-CH Series** | **Product Code: See Table 1** | **SEC: 3** | **SPEC: V183** | **REV: 1107**

Specifications	S-10X	S-10X-C
Format	NTSC	PAL
Type	Color	Color
Optical Zoom	10X	10X
Digital Zoom	10X	10X
Total Zoom	100X	100X
Zoom Speed	Fast/Slow, programmable	Fast/Slow, programmable
Image Device	1/4-inch Sony Super HADCCD	1/4-inch Sony Super HADCCD
Picture Element (Effective)s	768(H) x 494 (V), 380,000 pixels	752(H) x 582 (V), 440,000 pixels
Scanning System	2:1 interlace, 525 lines 60 fields/sec	2:1 interlace, 625 lines 50 fields/sec
Sensitivity at 50 IRE, f/1.8)	0.07 fc (0.7 lux)	0.07 fc (0.7 lux)
Horizontal Resolution	500 TV lines	500 TV lines
S/N Ratio	More than 50 dB	More than 50 dB
Synchronization	Internal	Internal
Backlight Compensation	ON/OFF	ON/OFF
Iris Control	Automatic/Manual	Automatic/Manual
White Balance	AWB/ATW/Indoor/Outdoor	AWB/ATW/Indoor/Outdoor
Image Stabilizer	Compensation Function	Compensation Function
Video Focus	Automatic/Manual	Automatic/Manual
Minimum Shooting Distance	1.1 ft (wide)/2.6 ft (tele) (0.35 m/0.8 m)	1.1 ft (wide)/2.6 ft (tele) (0.35 m/0.8 m)
White Balance	AWB/ATW/Indoor/Outdoor	AWB/ATW/Indoor/Outdoor
Digital Slow Shutter (DSS)	ON/OFF	ON/OFF
Flickerless	ON/OFF (1/100)	ON/OFF (1/120)
Mirror	ON/OFF	ON/OFF
Flip	ON/OFF	ON/OFF
Focal Length	3.8 - 38 mm	3.8 - 38 mm
Aperture/Gain Control	01-15	01-15
Horizontal Angle of View	51.2° wide, 5.58° tele	51.2° wide, 5.58° tele

Table2: Camera/Lens Specifications

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