

DIAMOND SERIES
PROGRAMMABLE
HIGH-SPEED DOME

SMARTSCAN Pro II WEATHERDOME

The SmartScan Pro II WeatherDome, programmable variable-speed dome, is specially engineered with a high, variable speed pan/tilt (0.5°/s to 125°/s pan and 0.5°/s to 60°/s tilt) to position cameras quickly. Since the optically correct dome allows viewing in all directions through 360° continuous scanning, the total number of necessary cameras can be reduced.

Any camera can be directed to as many as 100 predefined viewing positions (PreShots) by a single keyboard command or external alarm. These positions can be given up to 16-character names to identify the area being viewed. Up to 64 PreShots can be linked to form a Video Guard Tour, which can be executed upon command.

Each SmartScan Pro II WeatherDome employs a high sensitivity, 1/4" color CCD camera with 470 TVL of horizontal resolution for sharp, high definition color images. A built-in 12X optical (4.0 to 48mm) plus 4X digital (48 to 192mm) motorized zoom lens provides the desired viewing angle as well as offers a unique auto-focus feature.

All dome versions are designed to blend in with facility aesthetics while providing discreet camera surveillance. The outdoor WeatherDome has a white sunshroud to reflect the sun, as well as an integrated heater and blower.

These domes are easily operated by a desktop, RS-422 joystick controller with unique 3-axis proportional direction of pan/tilt/zoom functions. The controller sends its signals to a receiver/driver integrated into the pan/tilt. Up to 10 domes stretching a maximum distance of 4000' can be controlled using a single link. Systems can be expanded for video and data control of up to 128 domes using the CATS series video matrix system.



FEATURES

- 9" WeatherDome
- Integrated variable speed pan/tilt - 125°/s pan and 60°/s tilt
- Integrated RS-422 receiver/driver
- Integrated high resolution color camera with 48X zoom lens and auto-focus
- 100 programmable PreShot positions with 16-character on-screen identification
- 10 Video Guard Tours
- 16 sector ID on-screen messages
- Uses proportional 3-axis joystick controller
- Up to 128 domes using the CATS series video matrix system and peripherals
- Blends in with surrounding aesthetics with smoked or clear dome with liner options
- Quick and easy override from auto focus to manual operation
- Optional heater/blower and separate surge protection power supply for WeatherDome
- 1-year factory warranty



SMARTSCAN PRO II WEATHERDOME

TECHNICAL SPECIFICATIONS

MODELS

SmartScan Pro II WeatherDome 9" SmartScan Pro II WeatherDome with high resolution, auto focus 1/4" CCD color camera and built-in 12X optical (4.0 to 48mm) plus 4X digital (48 to 192mm) motorized zoom lens. It comes standard with 100 programmable PreShot positions, 10 guard tours and 16 sector ID's. It also includes an integrated 125'/s variable speed, 360° rotation pan/tilt with RS-422 receiver/driver, includes 2' x 2' adapter. This model has a smoked or clear lower dome with liner.

ELECTRICAL (DOME)

Input Voltage-Scan	24V ac ± 10%, 60Hz ± 1%
Input Voltage-Heater	115V ac ± 10%, 60Hz ± 1%
Power Consumption	30W (24V ac)
Power Transformer	120V ac, 60Hz to 24V ac @ 40 VA
Max. Camera Power	8W (12V dc or 24V ac)
Communications	RS-422, twisted pair, shielded
Max. Comm. Dist.	4000 ft. between controller and last dome in link, max. 10 domes per link

MECHANICAL (DOME)

Angular Travel:	
Horizontal	360° continuous sealed slip ring design
Vertical	0° horizontal to 90° down
Speed:	
Pan	Continuously variable 0.5° to 125° per second
Tilt	Continuously variable 0.5° to 60° per second
Braking Dynamic	±1/2° accuracy
Drive Motors	19V dc servo type
Camera Mounting	Adjustable camera sled connected to pan/tilt yoke
Max. Camera/Lens:	
Length	Camera lens provided
Weight	1 lbs (0.4kg)
Cable Entry:	
Pendant	Nipple at top of upper dome
Cable Connection:	
Pendant	Pigtail through nipple at top of upper dome
Construction:	
Pendant	Optically graded, cell cast acrylic
Finish:	
Upper Dome:	
Sunshroud	Reflective acrylic
Inner Top	Black opaque top
Pendant	Smoked, black inner coating
Lower Dome:	
Pendant	Smoked, clear with liner
Dimensions	See drawings
Weight	10 lbs (4.54 kg.)

Design and specifications are subject to change without notice.

GENERAL (DOME)

Optical Losses	Smoked - equivalent F-stop 1.0 filtration neutral density (no color distortion)
Resolution	Passes full camera resolution with 200mm focal length lens
Environment	Outdoor

RECOMMENDED CONTROL EQUIPMENT

JPD-100 RS-422, desktop 3-axis proportional controller for pan/tilt/zoom control, focus and iris on separate toggle switch. Also includes 8 quick keys for MultiCall functions. Operates SmartScan, SmartScan Pro II, FastScan Pro II or VariScan domes using SSI100 or CCU100 and DIA-01. Using the CCU100, it can control CATS video matrix switchers for both data and video control. A maximum of 4000' is possible between JPD-100 controller or control interface and last dome in link, up to 10 domes per link.

JPD-100P Same as above except operates using MSI100.

JPD-101 Stand alone version of JPD-100, can control SmartScan, SmartScan Pro II, FastScan Pro II or VariScan domes or CATS matrix switchers directly without using SSI100 or CCU100. Only requires DIA-01 or DIA-02.

DIA-01 Control Interface Adapter, provides 5V dc power and data interface for JPD-100 or JPD-101 joystick controllers.

DIA-02 Dual control Interface Adapter, provides 5V dc power and data interface for two JPD-101 joystick controllers.

KBD-100 Programming keyboard to provide full SmartScan programming capabilities including programming PreShots (predefined camera position), VectorScans (multiple PreShots linked together in a tour), and sector ID's.

CCU100 Central Control Unit for JPD-100, supports up to 3 joystick telemetry inputs. When used with the AIU100, it will control alarms for video switching, video recording, PreShot positioning and VectorScans.

AIU100 Alarm Interface Unit with 32 N/O or N/C contact inputs. Must be used in conjunction with the CCU100. Can be expanded to 255 alarm contacts by connecting up to eight AIU100's to the CCU100.

MSI100 Medium System Interface for the JPD-100P to control up to 32 SmartScan, SmartScan Pro II, FastScan Pro II or VariScan domes. Includes 32 input x 4 output video switcher, 32 alarm inputs, 2 auxiliary contact outputs, 4 control ports and 4 dome data ports.

SSI100 Small System Interface for the JPD-100 to control up to 8 SmartScan, SmartScan Pro II, FastScan Pro II or VariScan domes. Includes 8 input x 2 output video switcher, 12 alarm inputs and 2 auxiliary contact outputs.

CATS CATS video matrix switchers are available in configurations from 8 inputs with 2 outputs to 128 inputs with 16 outputs. Optional features include on-screen titles, looping or terminating inputs, desktop or rack-mount versions, relay outputs and alarm interface for automatic call-up with CCU100 and AIU100. The CATS video matrix switchers are fully compatible with the JPD-100 or JPD-101 joystick controllers.

COE08 The COE, code expander units, are used to expand the number of SmartScan programmable domes or UltraDome V15 high speed domes directly controlled by the JPD-101 or expand the data outputs of the CATS video matrix switchers. The units are available in 8 channel desktop or rack-mount versions (also available in 16 output versions). Each channel is capable of supplying information to 10 units with a maximum of 4000' per data link.

MUX05 Joystick multiplexing unit which provides control expansion capability for up to five JAD-832 or JPD-101 controllers and 7 data link outputs. A maximum of 4000' is possible between the MUX05 and individual joystick controllers.

GENERAL (CAMERA/LENS)

Color Camera

Ambient Temp. 14°F to 113°F (10°C to 45°C)

B&W Camera

Operating Temp. 14°F to 113°F (10°C to 45°C)

Operating

Humidity < 95% RH

MECHANICAL (CAMERA/LENS)

Color Camera

Weight .29 kg (10.4 oz)

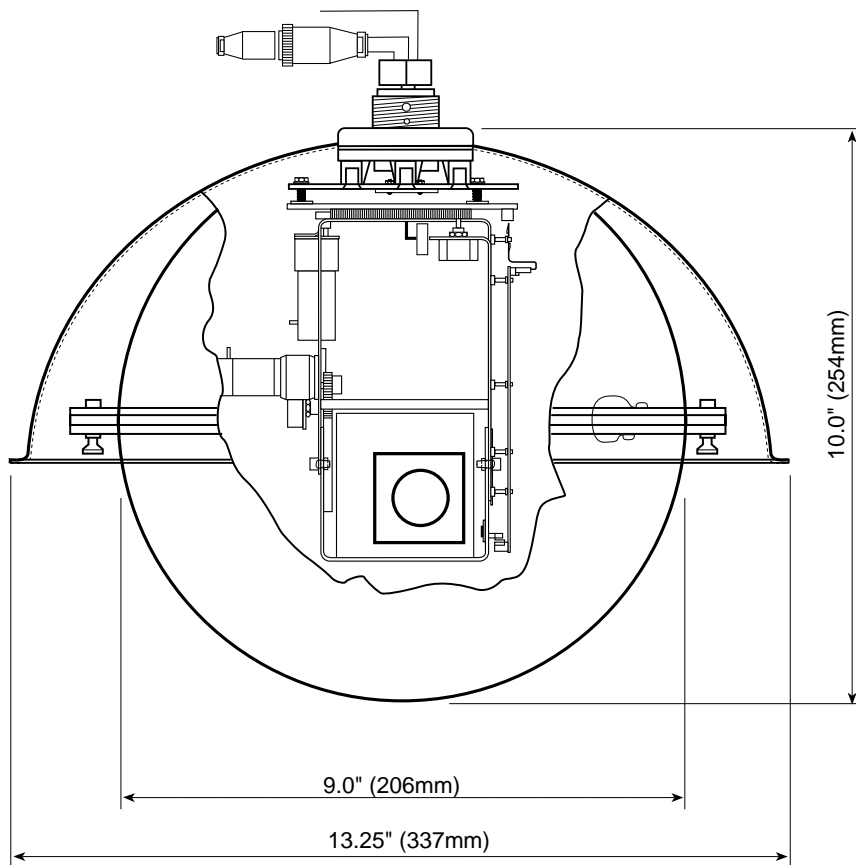
Dimensions 3.54"W x 2.56"H x 1.38"D
(90mm x 65mm x 35mm)

B&W Camera

Weight .29 kg (10.4 oz)

Dimensions 3.54"W x 2.56"H x 1.38"D
(90mm x 65mm x 35mm)

SmartScan Pro II WeatherDome



SMARTSCAN PRO II WEATHERDOME

TECHNICAL SPECIFICATIONS

ELECTRICAL (CAMERA/LENS)

Image Sensor	1/4" interline transfer CCD
Active Pixels	768H x 494V
Resolution	470 horizontal TV lines
Min. Scene Illum.	2.0 lux, F1.6
Signal-to-Noise	> 46db
AGC	Automatic
White Balance	Automatic
Backlight Comp.	Yes
Signal Format	NTSC (color), 525 lines
Video Output	1.0Vp-p, negative sync, 75 Ohms, unbalanced (BNC)
Power Requirements	12V dc
Power Consumption	< 3W
Lens	12X optical (4.0 to 48mm) plus 4X digital (48 to 192mm) motorized zoom lens, auto/manual focus control

MECHANICAL (CAMERA/LENS)

Dimensions	2.4W x 2.2H x 3.5D in (60W x 55H x 90D mm)
Weight	0.25 kg

GENERAL (CAMERA/LENS)

Ambient Temp.	32°F to 104°F (0°C to 40°C)
Ambient Humidity	0% to 95% (non-condensing)

CONFIGURATION OPTIONS

Step 1:	Tops
KD-DD09TWSB	9" WeatherDome top for SmartScan Pro II and FastScan Pro II. Will accommodate yokes with heater and/or blower. No power supply. May use with yokes KD-D1H9P65H and KD-D1C9P65H
KD-DD09TWS0	9" WeatherDome top for SmartScan Pro II and FastScan Pro II - no power supply. Compatible with yokes KD-D1H9P650 & KD-D1C9P650 only (ie will not accommodate yokes with heater or blower)

NOTE: One of the below power supplies must be used with the above

Step 2:	Yokes
KD-D1H9P650	SmartScan Pro II WeatherDome yoke for 9" WeatherDome, no heater/blower
KD-D1H9P65F	SmartScan Pro II WeatherDome yoke for 9" WeatherDome, including blower unit
KD-D1H9P65H	SmartScan Pro II WeatherDome yoke for 9" WeatherDome, including heater & blower

Step 3:	Bottoms
KD-DD09BXTH	9" WeatherDome bottom, clear with liner
KD-DD09BXSO	9" smoked dome bottom for indoor and outdoor WeatherDome applications

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CONFIGURATION OPTIONS (CON'T)

Step 4:	Power Supplies
KD-TR24/D	Plug in style power supply for SmartScan Pro II and FastScan Pro II yokes. Note: two are required for yokes with heater/blower assemblies.
KD-TR24WSPL (Recommended)	Nema 4 enclosed 24V ac power supply & surge suppression for SmartScan Pro II and FastScan Pro II 9" WeatherDome

Step 5:	Outdoor Mounts
UL-DWM-19/S	Wall mount with support strut, for use with WeatherDome
UL-DPM-15	Pendant mount, for use with WeatherDome

Outdoor Mount Adapters	
UL-PMA-18	Pole adapter for UL-DWM-19/S
UL-CMA-18	Corner adapter for UL-DWM-19/S
UL-PRM-100	Parapet-roof mount
UL-RM-100	Flat-roof mount
UL-PAT-100	Pole adapter for DE-TR-24/WSP

- STEP 1:** Specify WeatherDome top.
STEP 2: Specify SmartScan WeatherDome yoke assembly.
STEP 3: Specify WeatherDome bottom.
STEP 4: Specify power supply.
STEP 5: Specify WeatherDome mounting arrangement.

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