SECTION 28 23 29

PERFORMANCE SERIES 620 TVL DAY/NIGHT INDOOR FIXED MINI-DOME CAMERA, HD41

1. GENERAL
	1. SECTION INCLUDES
		1. Provide a day/night 620 TVL indoor mini-dome camera with vari-focal auto iris lens for video surveillance; including design, supply, installation and commissioning.
	2. RELATED SECTIONS

NOTE TO SPECIFIER: Include related sections as appropriate if video surveillance system is integrated to other systems.

* + 1. Section 26 05 00 – Common Work Results for Electrical, for interface and coordination with building electrical systems and distribution.
		2. Section 28 05 13 – Conductors and Cables for Electronic Safety and Security, for cabling between system servers, panels, and remote devices.
		3. Section 28 05 28 – Pathways for Electronic Safety and Security, for conduit and raceway requirements.
		4. Section 28 23 23 – Video Surveillance Systems Infrastructure.
		5. Section 28 23 29 – Video Surveillance Remote Devices and Sensors.
	1. REFERENCES
		1. Reference Standards: Provide systems that meet or exceed the requirements of the following publications and organizations as applicable to the work of this Section:
			1. Canadian ICES-003
			2. Canadian Standards Association (CSA)
			3. Federal Communications Commission (FCC)
			4. Joint Photographic Experts Group (JPEG)
			5. National Television Systems Committee (NTSC)
			6. Underwriters Laboratories Inc. (UL)
	2. SYSTEM DESCRIPTION
		1. The Performance Series indoor fixed mini-dome camera shall use a flexible indoor enclosure that can be mounted quickly to a flat surface, easily installed directly to a ceiling or wall.
		2. The Performance Series indoor fixed mini-dome camera shall capture video in 620 TV lines high resolution and with a wide field of view range. As a Day/Night solution, the indoor fixed mini-dome camera has a low light sensitivity of 0.3 lux. The camera is designed for a broad range of surveillance applications and features Digital Signal Processing (DSP) for clean, sharp images.
	3. SUBMITTALS
		1. General: Submittals shall be made in accordance with the Conditions of the Contract and Submittal Procedure Section.
		2. Manufacturer’s Product Data: Submit manufacturer’s data sheets indicating systems and components proposed for use, including instruction manuals.
		3. Shop Drawings: Submit complete shop drawings including connection diagrams for interfacing equipment, list of connected equipment, and locations for major equipment components.
		4. Record Drawings: During construction maintain record drawings indicating location of equipment and wiring. Submit an electronic version of record drawings not later than Substantial Completion of the project.
		5. Operation and Maintenance Data: Submit manufacturer’s operation and maintenance data, customized to the system installed. Include system and operator manuals.
		6. Field Tests: Submit results of field testing of every device including date, testing personnel, retesting date (if applicable), and confirmation that every device passed field testing.
		7. Maintenance Service Agreement: Submit a sample copy of the manufacturer’s maintenance service agreement, including cost and services for a one year period for Owner’s review. Maintenance shall include, but not be limited to, labor and materials to repair the system, tests and adjustments, and regular inspections.
	4. QUALITY ASSURANCE
		1. Manufacturer: Minimum ten years experience in manufacturing and maintaining video surveillance systems. Manufacturer shall provide toll-free technical assistance and support available 24/7.
		2. Manufacture Location: Provide equipment assembled in Korea.
		3. Installer: Minimum two years experience installing similar systems, and acceptable to the manufacturer of the video surveillance system.
		4. Regulatory Requirements:
			1. Emissions: FCC, Part 15B, Class A.
		5. Environmental Requirements:
			1. Operating temperatures shall be between −10° C (14° F) and 50° C (122° F).
			2. Storage temperatures shall be between −20° C (−4° F) and 60° C (140° F).
		6. Power Requirements: Input voltage shall be 12 V DC.
	5. DELIVERY, STORAGE, AND HANDLING
		1. Deliver materials in manufacturer’s labeled packages. Store and handle in accordance with manufacturer’s requirements, in a facility with environmental conditions within recommended limits.
	6. WARRANTY
		1. Manufacturer’s Warranty: Submit manufacturer’s warranty of three (3) years from the manufacture date code under normal use and service for the video surveillance system.
1. PRODUCTS
	1. MANUFACTURER
		1. Performance Series Camera Manufacturer: Honeywell HD41 Performance Series day/night indoor 620 TVL fixed mini-dome camera, [www.honeywellvideo.com](http://www.honeywellvideo.com) or [www.honeywellintegrated.com](http://www.honeywellintegrated.com).
	2. SYSTEM COMPONENTS
		1. Mini-dome camera and cabling.
	3. OPERATIONAL REQUIREMENTS
		1. The Performance Series fixed indoor mini-dome camera system shall meet or exceed the following camera specifications:
			1. Image Sensor: 1/3-inch Interline Transfer CCD
			2. Total Pixels: 768 (H) × 494 (V)
			3. Horizontal Resolution: 620 TVL
			4. Lens Type: 2.8–12 mm Vari-focal Auto Iris, F1.4
			5. Angle of View: 96.7° – 24.1° horizontal; 71.2° – 18.2° vertical
			6. Minimum Illumination: 0.3 lux @ F1.2 (AGC on, 50 IRE)
			7. Shutter Speed: 1/60–1/100,000 seconds
			8. Video Output: Composite, 1.0 Vp-p, 75 ohms
			9. White Balance: Auto Tracking White Balance (ATW), Auto White Control (AWC), Manual
			10. Signal-to-Noise Ratio: 50 dB (AGC Off, Weight On)
			11. Synchronization: 12 V DC, Internal
		2. The indoor fixed mini-dome camera shall provide day/night functionality outstanding image quality under almost any light conditions.
		3. The indoor fixed mini-dome camera shall provide digital noise reduction (DNR).
		4. The indoor fixed mini-dome camera shall provide backlight compensation.
		5. The indoor fixed mini-dome camera shall provide automatic gain control.
		6. The indoor fixed mini-dome camera shall provide automatic white balance settings.
		7. The indoor fixed mini-dome camera shall provide fully configurable motion detection settings and four motion detection areas.
		8. The indoor fixed mini-dome camera system shall provide 12 V DC operation.
		9. The indoor fixed mini-dome camera shall have a 3D axis gimbal for precise camera positioning.
		10. The indoor fixed mini-dome camera housing shall consist of ABS material with a matte texture, off-white finish and the dome shall consist of impact-resistant polycarbonate material.
	4. SYSTEM HARDWARE
		1. The indoor fixed mini-dome camera shall have the following mechanical specifications:
			1. Unit Dimensions (L x H x W): 5.12” x 4.02” x 5.12” (130.0 mm x 102.0 mm x 130.0 mm).
			2. Unit Weight: 0.66 lb (0.3 kg)
			3. Video Output: BNC connector (75 ohms)
			4. Power Input: 2.1 mm plug
		2. The indoor fixed mini-dome camera shall have the following electrical specifications:
			1. Voltage: 12 V DC
			2. Input Range: 12 V DC ± 10%
			3. Power Consumption: 4.0 W maximum
		3. The indoor fixed mini-dome camera shall be designed to meet the following environmental conditions:
			1. Operating Temperature: 14°F to 122°F (-10°C to 50°C)
			2. Storage Temperature: -4°F to 140°F (-20°C to 60°C)
			3. Relative Humidity: 0-95%, non-condensing
			4. Emissions: FCC, Part 15B, Class A
	5. MANUFACTURER SUPPORT
		1. Manufacturer shall provide customer service, pre-sales applications assistance, after-sales technical assistance, access to online technical support, and online training using Web conferencing.
		2. Manufacturer shall provide 24/7 technical assistance and support by means of a toll-free telephone number at no extra charge.
2. EXECUTION
	1. EXAMINATION
		1. Examine site conditions prior to installation. Notify Architect and Owner in writing if unsuitable conditions are encountered. Do not start installation until site conditions are acceptable.
	2. INSTALLATION
		1. All components of the camera system shall be thoroughly tested before shipping to the project location.
		2. Camera system shall be installed, programmed, and tested in accordance with manufacturer’s installation instructions.
			1. Coordinate interfaces with Owner’s representative where appropriate.
			2. Provide conduit, cable and wire for a complete and reliable installation. Obtain Owner’s approval for exact location of the camera and all boxes, conduit, cable, and wiring runs prior to installation.
			3. Install conduit, cable, and wire parallel and square with building lines, including raised floors areas. Do not exceed 40 percent fill in conduits. Gather wires and tie to create an orderly installation.
			4. Coordinate with other trades to provide proper sequencing of installation.
	3. FIELD COMMISSIONING AND CERTIFICATION
		1. Field Commissioning: Test mini-dome camera system as recommended by manufacturer, including the following:
			1. Conduct complete inspection and testing of equipment, including verification of operation with connected equipment.
			2. Test devices and demonstrate operational features for Owner’s representative and authorities having jurisdiction, as applicable.
			3. Correct deficiencies until satisfactory results are obtained.
			4. Submit written copies of test results.
	4. TRAINING
		1. Conduct on-site system administrator and security/surveillance operator training, with the number of sessions and length of sessions as recommended by the video surveillance system manufacturer. Training shall include, but not limited to camera administration, provisioning, configuration, operation, and diagnostics.

 END OF SECTION