September 2022

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**Product Guide Specification**

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format, based on *MasterFormat 2016* and *The Project Resource Manual—CSI Manual of Practice. The Manufacturer is responsible for technical accuracy.*

The section must be carefully reviewed and edited by the Architect or Engineer to meet the requirements of the project and local building code. Words and sentences within brackets [ ] are choices to include or exclude a particular item or statement. Coordinate this section with other specification sections and the Drawings. Delete all “Specifier Notes” after editing this section.

**Section 28 21 00: Video Security**

**RFID Reader**

1. **– GENERAL**
	1. SUMMARY
		1. Section Includes
			1. Video Security – Security Cameras – Camera Housings
			2. Video Security – Security Cameras – Camera Mounts
			3. Video Security – Video Security Sensors
		2. Related Sections
			1. [Section 28 33 15: Security Detection, Alarm and Monitoring – Security Monitoring and Control – Security Monitoring and Control Software].

\*\*\*\*\*\*\*\*\*\*Specifier’s note: Include those standards referenced elsewhere in this SECTION.

* 1. REFERENCES
		1. CE Standard
			1. EN 55032:2015
			2. EN 61000-3-2:2019
			3. EN 61000-3-3:2013+A1:2019
			4. EN 55035:2017
			5. EN 50130-4:2011/A1:2014
			6. EN 55024:2010/A1 :2015
		2. Federal Communications Commission (FCC) ([www.fcc.gov](http://www.fcc.gov))
			1. CFR 47 FCC Part 15 Subpart
		3. ANSI Standard
			1. ANSI C63.4-2014
		4. ITE Standard
			1. ICES-003 Issue 7
	2. SYSTEM DESCRIPTION
		1. Section Includes
			1. Video Security – Video Security Sensors
		2. Performance Requirements:
			1. The RFID Reader shall be a full-featured RFID Reader unit designed for access control in indoor and outdoor environments.
			2. The RFID Reader shall have a transmission distance of 0 cm to 5.0 cm (0 in. to 1.97 in.).
			3. The RFID Reader shall use RS-485 and Wiegand protocols.
			4. The RFID Reader shall have a card reading frequency of 13.56 MHz MIFARE.
			5. The RFID Reader shall offer audio and visual indicators.
			6. The RFID Reader shall offer IP66 environmental protection with a silicone sealant.
			7. The RFID Reader shall accept power from a 12V 0.5A DC source.
			8. The RFID Reader shall be capable of operating in an outdoor environment within a temperature range of –30 °C to +70 °C (–22 °F to +158 °F).
	3. SUBMITTALS
		1. Product Data:
			1. Manufacturer’s data, user and installation manuals for all equipment and software programs including computer equipment and other equipment required for complete video management system.
		2. Dimensional Drawings; include
			1. Overall device dimensions.
			2. Dimensions specific for installation.
		3. Closeout Submittals
			1. User manual.
			2. Parts list.
			3. Maintenance requirements.
	4. QUALITY ASSURANCE
		1. Manufacturer:
			1. Minimum of [10] years of experience in manufacture and design Video Security Devices.
		2. Video Security System:
			1. List certifying bodies (UL, etc.)
			2. Provide evidence of compliance upon request.
		3. Installer:
			1. Minimum of [5] years of experience installing Video Security System.
	5. DELIVERY, STORAGE AND HANDLING
		1. Comply with requirements of Section 01 60 00.
		2. Deliver materials in manufacture’s original, unopened, undamaged containers; and unharmed original identification labels.
		3. Protect store materials from environmental and temperature conditions following manufacturer’s instructions.
		4. Handle and operate products and systems according to manufacturer’s instructions.
	6. WARRANTY
		1. Provide manufacturer’s warranty covering [4] years for replacement and repair of defective equipment. Warranty varies country to country.
	7. MAINTENANCE
		1. Make ordering of new equipment for expansions, replacements, and spare parts available to dealers and end users.
		2. Provide factory direct technical support via phone and e-mail.
1. **– PRODUCTS**
	1. MANUFACTURERS
		1. [Acceptable Manufacturer:

Dahua Technology USA Inc.

15425 Alton Parkway, Irvine, CA 92618

Tel: (949) 679-7777

Fax: (949) 679-5760

Email: sales.usa@global.dahuatech.com]

* + 1. Substitutions:
			1. [All proposed substitutions must be approved by the Architect or Engineer professional.]
			2. [Proposed substitutions must provide a line-by-line compliance documentation.]
	1. RFID Reader – DHI-ASR2200A
		1. General Characteristics
			1. The RFID Reader shall be a full-featured RFID Reader unit designed for access control in indoor and outdoor environments.
			2. The RFID Reader shall offer a tamper alarm and buzzer.
			3. The RFID Reader shall offer a Card Swipe unlock method.
			4. The RFID Reader shall support Wiegand and RS-485 protocols.
			5. The RFID Reader shall have a card reading frequency of 13.56 MHz MIFARE.
			6. The RFID Reader shall have a transmission distance of 0 cm to 5.0 cm (0 in. to 1.97 in.).
			7. The RFID Reader shall have a response time of 0.1 seconds.
			8. The RFID Reader shall offer audio and visual indicators.
			9. The RFID Reader shall have a Watch Dog Function to detect tampering.
		2. Interface
			1. The RFID Reader shall offer one (1) RS-485 Channel and one (1) Wiegand Output Channel.
		3. Installation Requirements
			1. The RFID Reader shall be capable of operating in an outdoor environment within a temperature range of –30 °C to +70 °C (–22 °F to +158 °F).
			2. The RFID Reader shall have surface-mounted installation.
			3. The RFID Reader shall accept power from a 12V 0.5A DC source.
		4. Housing Options
			1. The RFID Reader shall be offered in a PC and Acrylic Panel casing.
			2. The RFID Reader shall offer IP66 environmental protection with a silicone sealant.
	2. ACCESSORIES
		1. The RFID Reader shall offer the following accessories:
			1. Optional hardware:
				1. [IC Card]
				2. [IC Key Fob]

**PART 3 – EXECUTION**

* 1. EXAMINATION
		1. Examine areas to receive devices and notify adverse conditions affecting installation or subsequent operation.
		2. Do not begin installation until unacceptable conditions are corrected.
	2. PREPARATION
		1. Protect devices from damage during construction.
	3. INSTALLATION
		1. Install devices in accordance with manufacturer’s instruction at locations indicated on the floor drawings plans.
		2. Perform installation with qualified service personnel.
		3. Install devices in accordance with the National Electrical Code or applicable local codes.
		4. Ensure selected location is secure and offers protection from accidental damage.
		5. Location must provide reasonable temperature and humidity conditions, free from sources of electrical and electromagnetic interference.
	4. FIELD QUALITY CONTROL
		1. Test snugness of mounting screws of all installed equipment.
		2. Test proper operation of all video system devices.
		3. Determine and report all problems to the manufacturer’s customer service department.
	5. ADJUSTING
		1. Make proper adjustment to video system devices for correct operation in accordance with manufacturer’s instructions.
		2. Make any adjustment of camera settings to comply with specific customer’s need.
	6. DEMOSTRATION
		1. Demonstrate at final inspection that video management system and devices functions properly.

END OF SECTION