

TC-E1212WR

Architectural and Engineering Specifications

Version v1.0
(Jun. 3, 2016)

PART 1: PLEASE REFER TO ATTACHED DOCUMENTS - OVERVIEW & FORMAT SAMPLES**PART 2: PRODUCTS****Division 28 – Electric Safety and Security****Section 28 23 29 – Video Surveillance Remote Devices and Sensors****2.1.0 Manufacturer**

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2.2.0 General**2.2.1 Product Description**

TC-E1212WR is a HD-TVI Small Bullet Camera designed and manufactured by IDIS. This camera provides Full HD 1920x1080 resolution. Also, this camera is compatible with Fixed-focal lens type with capability of Fixed IRIS control. In addition, supports for progressive scan CMOS, privacy masking and motion detection are provided. This camera supports standard communication protocols and it provides OSD which is available in various languages. This camera is equipped with Day&Night, IR LED, 12VDC and Vandal-proof bullet enclosure design and IP66 rated.

2.2.2 General Specification

1. The HD-TVI camera shall be equipped with 2 Megapixel 1/2.8" CMOS Sensor for capturing Full HD images.
2. The HD-TVI camera shall be equipped with 3.6mm fixed-focal lens.
3. The HD-TVI camera shall be a Day&Night camera with a mechanical filter for low light performance. The filter can be switched remotely, or automatically via a light level sensor or contact input (ICR).
4. The HD-TVI camera shall have WDR(Wide Dynamic Range) compensation for improved video quality in high-contrast situations at 15fps(frame per second). So even too light images can be seen to make it dimmed. This camera shall support True WDR as well as Digital WDR.
5. The HD-TVI camera shall be equipped with 24ea Infrared LED with range up to 10m.
6. The HD-TVI camera shall utilize configurable 2DNR+3DNR(Dynamic Noise Reduction) technology to reduce the bitrate and storage requirements by removing noise artifacts.
7. The HD-TVI camera shall be vandal proof and IP rating 66 complied dome enclosure design.
8. The HD-TVI camera shall be equipped with Coaxial cable connection.
9. The HD-TVI camera shall use 12VDC power input to supply power to the camera.
10. The HD-TVI camera shall have video out feature (NTSC/PAL).
11. The HD-TVI camera shall deliver maximum video resolution of 1920x1080 at 30ips(images per second) when the True WDR is off.

12. The HD-TVI camera shall support De-fog feature mode. It is the image compensation feature for the clear video in the mist or fog environment.
13. The HD-TVI camera shall support Motion Detection functionality.
14. The HD-TVI camera shall support OSD(On-Screen Display) Control over Coax. The control UI can be seen On-Screen Display and it goes through the coaxial cable connection.
15. The HD-TVI camera shall support UTC(Up The Coax) mode. It can be set and used as PTZ - UTC on Camera Setup. The UTC can allow user to remotely set the camera's OSD through its UTC IC - Coaxial Cable.
16. The HD-TVI camera shall support HSBLC(Highlight Suppression Back Light Compensation) with 1~20 level adjustable. It makes stable video quality with preventing specific back light source from images.

2.3.0 Technical Specification

2.3.1 Video Specification

1. Image Sensor: 2 Megapixel 1/2.8" CMOS
2. Pixels:
 - A. Effective Pixels: 1984(H) x 1105(V) / 2.19M
 - B. Total Pixels: 2000(H) x 1121(V) / 2.24M
3. Maximum Resolution: 1920 x 1080
4. Scanning Mode: Progressive Scan
5. Lens Type: Fixed-focal (f=3.6mm)
6. Iris Control: Fixed Iris
7. Angular Field of View : 92.6°(H), 54.6°(V), 120.0°(D)
8. Minimum Illumination:
 - A. Color: 0.9 Lux @ F1.8
 - B. B/W: 0 Lux (IR LED On)
9. S/N Ratio: more than 50dB
10. Electronics Shutter Speed: Auto, Manual (1/30, 1/25 Sec ~ 1/30000 Sec) and Flicker Mode
11. Maximum Frame Rate: 30ips@1920x1080
12. Video Resolution: 1920x1080 / 1280x720 / 1280x720 Crop
13. Day & Night: Yes (ICR)
14. IR Distance (LEDs): 10m / 32.8ft. (24ea)
15. Video Output: 1 HD BNC, 1 SD BNC

2.3.2 Functional Specification

1. AGC(Automatic Gain Control): 0~20 Level Adjustable
2. Brightness: 0~20 Level Adjustable

3. Sens-Up¹: Off / x2 ~ x32
4. WDR
 - A. Selectable Options are Low, Middle, High and Off.
 - B. When WDR option is On (Low / Middle / High), camera acts at 120dB and 15fps.
5. BLC(Back Light Compensation): Off / On
6. HSBL: 1~20 Level Adjustable (All Day / Night Only)
7. ACE² (Digital WDR / ATR³-EX): Off / Low / Middle / High
8. Motion Detection: Off / On (4 Zone)
9. Privacy Masking: Off / On (16 Zone)
10. Day&Night: Color / B&W / Extern
 - A. Color: Set as during day time
 - B. B&W: Set as during night time
 - C. Extern: Day&Night mode changed according to external intensity sensor of illumination
11. Smart-IR (IR Optimizer): 0~20 Level Adjustable
12. White Balance: Auto (2,500K ~ 9,500K) / AWB (1,800K ~ 10,500K) / AWC→Set / Manual
13. DNR: configurable 2DNR+3DNR (Off / Low / Middle / High)
14. Mirror: Mirror / V-Flip
15. Digital Zoom / Electric Zoom: x1 ~ x8
16. Sharpness: 0~20 Level Adjustable
17. De-fog: Off / On
18. GAMMA Correction: $r = 0.45 \sim 0.65$
19. LSC(Lens Shading Compensation): Off / On

2.4.0 Environmental Specification

1. Out-door Ready: IP66
2. Vandal-proof Enclosure: Yes
3. Operating Environment
 - A. Temperature: $-10^{\circ}\text{C} \sim +50^{\circ}\text{C}$ ($+14^{\circ}\text{F} \sim +122^{\circ}\text{F}$)
 - B. Humidity: 0% to 90%
4. Storage Environment
 - A. Temperature: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$ ($-4^{\circ}\text{F} \sim +140^{\circ}\text{F}$)

¹ Image processing technology to prevent the blurred image in low light conditions. It allows that user can select digital slow shutter for gaining extra light to the camera and get higher sensitivity in dark conditions.

² ACE: Adaptive Contrast Enhancement

³ ATR: Adaptive Tone Reproduction

B. Humidity: 0% to 95%

2.5.0 Electrical Specification

1. Power Source: 12VDC
2. Power Consumption: 6W
3. Regulatory Approvals: FCC, CE

2.6.0 Mechanical Specification

1. Dimensions (W x H x D): 68mm x 64mm x 239.9mm (2.68" x 2.52" x 9.44")
2. Unit Weight: 0.5 Kg (1.10 lb)

Version History

Version	Writer	Revision Date	Remarks
1.0	Ray Sun	Jun. 3, 2016	Initial release