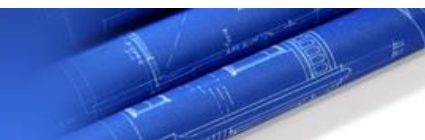


**Model: CCI2525R**

Architectural and  
Engineering Specifications

Version 1.0





## **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**

1. Costar Video Systems  
101 Wrangler Drive, Suite 201  
Coppell, Texas 75019  
Tel: 469-635-6800  
Fax: 469-635-6822

#### **2.2.0 General**

##### **2.2.1 Product Description**

CCI2525R is a Network Camera (IP Camera) designed and manufactured by Costar Video Systems. This camera provides Full HD (1920x1080) resolution at 30ips (images per second) with H.265/H.264/M-JPEG compression. This camera is equipped with Fixed-focal lens, True Day/Night, PoE (IEEE 802.3at Class 4), IR LED, Audio I/O, and Alarm I/O.

##### **2.2.2 General Specification**

1. The IP camera shall be equipped with 2 Megapixel 1/2.9" CMOS Sensor.
2. The IP camera shall be equipped with 2.5mm Fixed-focal lens, F2.0.
3. The IP camera shall be a True 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 IP camera shall have True Wide Dynamic Range compensation for improved video quality in high-contrast situations (120dB).
5. The IP camera shall utilize configurable 3DNR (Dynamic Noise Reduction) technology to reduce the bitrate and storage requirements by removing noise artifacts.
6. IP camera shall be equipped with 10/100 Base-T, auto-sensing, half/full duplex, RJ45 Ethernet connection.
7. The IP camera shall support industry standard Power over Ethernet (PoE) IEEE 802.3at, Class 4 to supply power to the camera over the network and 12VDC input.
8. The IP camera shall have video out feature (NTSC/PAL).
9. The IP camera shall be equipped with video stream buffer memory (60MB) to counter pre/post event buffering and network delays for improved network recording reliability.
10. The IP camera shall deliver maximum video resolution of 1920x1080 at rates up to 30ips





(Images per second).

11. The IP camera shall provide direct network connection using H.265, H.264 and M-JPEG\*\* compression (\*\* iNEX Protocol only).
12. The IP camera shall support Quadruple Streams in DirectNET protocol mode.
13. The IP camera shall support Quadruple Streams in iNEX protocol mode.
14. The IP camera shall conform to the ONVIF\*\* Profile S.
15. The IP camera shall be equipped with embedded web server (Webguard\*\*) which works independently using a Web Browser with ActiveX plug-in (\*\* iNEX Protocol only).
16. The IP camera shall have IP filtering, HTTPS, SSL, IEEE 802.1X, and configurable user authority levels for greater security.
17. The IP camera shall have network bandwidth limitation and MAT features for more efficient use of network bandwidth.
18. The IP camera shall have Easy network access via UPnP (Universal Plug and Play) function and embedded mDNS (Multicast DNS) protocol.
19. The IP camera shall have Intelligent Video Analysis (VA): Motion Detection, Audio Detection, Alarm-in, Active Tampering Alarm and Trip Zone.

### **2.2.3 Protocol Specification: DirectNET and iNEX Protocol**

1. The IP camera shall have 2 protocol modes, DirectNET and iNEX Protocol, and DirectNET is set as main protocol by default.
2. The protocol modes shall be selectable between DirectNET and iNEX protocol mode to meet specific needs with iNIT Discovery tool.
  - DirectNET Protocol
    - A. DirectNET protocol shall provide easy connection to DirectNET NVR for automatic discovery and video streaming configuration.
    - B. DirectNET protocol shall provide Quadruple streams.
    - C. The bitrate shall be automatically adjusted by recording profile of DirectNET NVR.
    - D. DirectNET protocol shall support H.265 and H.264 only as primary compression.
  - iNEX Protocol
    - A. iNEX protocol shall provide the compatibility with StarNET VMS, iNEX VMS or ONVIF for third-party software solutions.
    - B. iNEX protocol shall provide Quadruple streams.
    - C. iNEX protocol shall support H.265, H.264 and M-JPEG compression.





## **2.3.0 Technical Specification**

### **2.3.1 Video Specification**

1. Image Sensor: 1/2.9" CMOS
2. Maximum Resolution: 1920 x 1080
3. Scanning Mode: Progressive Scan
4. Lens Type: Fixed-focal (f= 2.5mm, F2.0)
5. IRIS Control: Fixed-Iris
6. Angular Field of View (H: Horizontal, V: Vertical, D: Diagonal):132°(H), 70°(V), 150°(D)
7. Minimum Illumination:
  - A. COLOR: 0.1 lux
  - B. B/W: 0.01 lux
8. S/N Ratio: More than 45dB
9. Maximum Frame Rate: 30ips @ 1920x1080
10. Video Resolution:
  - A. DirectNET protocol mode: 1920x1080, 1280x720, 704x480, 640x360, 352x240
  - B. iNEX protocol mode: 1920x1080, 1280x720, 704x480, 640x360, 352x240
11. Video Compression: H.265, H.264, M-JPEG\*\* (\*\* iNEX Protocol only)
12. Video Compression Level: Basic, Standard, High, Very High
13. Multi-Video Streaming:
  - A. DirectNET protocol mode: Quadruple streams
  - B. iNEX protocol mode: Quadruple streams
14. Dynamic Range: 120dB
15. True Day & Night: Yes (ICR)
16. Intelligent Video Analytic: Motion Detection, Audio Detection, Alarm-in, Active Tampering Alarm and Trip Zone

### **2.3.2 Audio Specification**

1. Audio Compression Algorithm: G.726 (16KHz), G.711 u-Law (8KHz), G.711 a-Law (8KHz)
2. Audio Input / Output: Line-in 1ea / Line-out 1ea
3. Two-way Audio Communication: Yes
4. Pre-recorded Voice Alert: Yes





### **2.3.3 Network Specification**

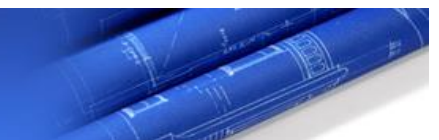
1. Port: RJ-45 10/100 Base-T 1 port
2. Network Protocols:
  - A. DirectNET Protocol Mode
  - B. iNEX Protocol Mode: RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/UDP, RTSP/TCP, HTTP, HTTPS, FTP, SNTP, SMTP, FEN, mDNS, uPNP
3. Streaming Mode: Unicast, Multicast

### **2.3.4 Security Specification**

1. DirectNET Protocol Mode: SSL Encryption
2. iNEX Protocol Mode: Multi-User Authority, IEEE 802.1x, IP Filtering, HTTPS, SSL Encryption
3. Maximum User Access:
  - A. DirectNET protocol mode: Direct camera access is unavailable.
  - B. iNEX protocol mode: Live + Admin (10), Recording (1), Search (1)

### **2.3.5 Alarm and Event Specification**

1. Alarm Input / Output
  - A. Alarm Input: TTL, NC,NO Programmable, 2.4V (NC) or 0.3V (NO) threshold, 5 VDC , Terminal Block
    - Choose between an NC (Normally Closed) type or an NO (Normally Open) type)  
Connect a mechanical or electrical switch to the alarm in port and the GND (ground) connector.
    - Alarm in range is 0V to 5V. In order to detect alarm input, the signal must be higher than 2.4V from an NC switch or less than 0.3V from an NO switch and must last for longer than 0.5 seconds.
  - B. Alarm Output: 1 relay out, 0.25A @ 250Vac, 1A @30Vdc, Terminal Block
    - Connect a mechanical or electrical switch to the NO and the COM connector
2. Trigger Events: Motion Detection, Audio Detection, Alarm-in, Active Tampering Alarm and Trip Zone
3. Event Notification: Remote Software, Email (with Image)
  - A. Encryption type: SSL





#### **2.4.0 Environmental Specification**

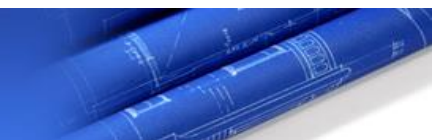
1. Operating Temperature: -10°C ~ +50°C (+14°F ~ +122°F)
2. Operating Humidity: 0% ~ 90%

#### **2.5.0 Electrical Specification**

1. Power Source: 12VDC, PoE (IEEE 802.3at class 4)
2. Power Consumption: 4.08W
3. Regulatory Approvals: FCC, CE, KC

#### **2.6.0 Mechanical Specification**

1. Dimensions (W x H x D) - Main module: 153mm x 36.5mm x 132.7mm (6.02" x 1.44" x 5.22")
2. Dimensions (W x H x D) - Camera module: 39mm x 40mm x 35mm (1.54" x 1.57" x 1.38")
3. Unit Weight: 0.9 kg (1.98 lb)





## Version History

Version	Writer	Revision Date	Remarks
1.0	Tech	Feb. 26, 2018	Initial Release

