



EDS-651

### Features

- Extensive camera and video functions
  - ✓ Built-in 1/4" EXviewHAD CCD
  - ✓ Integrated with 18x (f4.1 ~ 73.8mm / F1.4 ~ 3.0) optical zoom; 12x digital zoom lens
  - ✓ Supports horizontal resolution at 480 TV lines
  - ✓ Supports minimum illumination 0.005 Lux at F1.4
  - ✓ Supports day and night function with Mechanical IR Cut Filter
  - ✓ Supports backlight compensation, auto iris control and auto white balance
  - ✓ Supports video encode in MPEG-4 ASP format with full frame rate (30/25 for NTSC/PAL)
  - ✓ Supports video output in all type of resolutions (full D1/CIF/QCIF)
  - ✓ Supports multi-stream with variable frame rate in the same compression
  - ✓ Supports 2 way audio
  - ✓ Supports manually bitrate control from 28Kbps up to 3Mbps
  - ✓ Built-in hardware motion detection, digital input/output
  - ✓ Supports network security via setting up multiple user access levels
  - ✓ Supports fail-over network protection & L3 QoS enabled video streaming
- Networking & industrial protocols
  - ✓ Provides 2 x 10/100 Mbps auto MDI/MDI-X Ethernet ports with RJ-45 connector
  - ✓ Supports various networking protocols: TCP, UDP, IP, HTTP, SMTP, FTP, DNS, DDNS, DHCP, PPPoE, RTP, RTSP, NTP, ICMP, IGMP, ARP
- Power & Housing
  - ✓ Support 24VAC ±20% power input
  - ✓ Supports operating temperature from -0 to 40°C(32~104°F)
  - ✓ Vandal-proof cover available (optional)



### Overview

The EDS-651 is an Indoor Speed Dome type IP Camera with built-in PTZ feature. It is integrated with 18x (f4.1 ~ 73.8mm / F1.4 ~ 3.0) optical zoom; 12x digital zoom lens offer optimized performance in a variety of environments. With 480TV lines of resolution and built-in 1/4" EXviewHAD image sensor and its extreme low light support capability, EDS-651 target markets are those cost sensitive but demanding good quality images. With advanced features, the camera supports video encode in MPEG-4 ASP format with full frame rate and has built-in motion detection.

### Hardware Specifications

#### Interface

**RJ-45 Ports:** 2 x 10/100Base-TX auto-negotiation speed, Full/Half duplex, auto MDI/MDI-X (LAN/WAN)

#### BNC Connectors:

1 x CVBS, 1.0Vp-p with 75 Ω loading Video Output

#### Audio Connectors:

Unbalanced, 1.4 Vp-p, 1Vrms, terminal block connection

**Alarm Input/Output:** 8, TTL, terminal block (optional) / 1, TTL, terminal block (optional)

**Power Input:** VAC 24V ±20%

**Power Consumption:** 20 watts

**Casing:** Optional vandal-proof cover

**Dimensions:** 131 mm x 226 mm (5.2" x 8.9")

**Weight:** 1,600 g (3.5 lb)

**Installation:** Surface / Flush / Wall / Pole / Corner Mount

#### Environmental

**Operating Temperature:** 0 to 40°C(32~104°F)

### Technical Specifications

#### Standard:

IEEE 802.3 10Base-T Ethernet  
IEEE 802.3u 100Base-TX Fast Ethernet

#### Network Media:

10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable EIA/TIA-568 100-ohm (100m)  
100Base-TX: 2-pair UTP/STP Cat. 5/5e cable EIA/TIA-568 100-ohm (100m)

### Regulatory Approvals

**EMI:** FCC Part 15 Subpart B Class A (CISPR 22)

#### EMS:

IEC 6100-4-2, IEC 6100-4-3, IEC 6100-4-4  
IEC 6100-4-5, IEC 6100-4-6, IEC 6100-4-8  
IEC 6100-4-11

**Safety:** CE/EN55022 Class A, EN55024

**Environmental:** WEEE, RoHS

**Warranty:** 1 year

## Camera Specifications

### Camera

**Image Device:** 1/4" EXviewHAD CCD  
**Effective Pixels:**  
768 x 494 (NTSC); 752 x 582 (PAL)  
**Horizontal Resolution:** 480 TVL  
**Min. Illumination Color:** 0.1 Lux (F1.4, 1/4s(NTSC) or 1/3s (PAL))  
**Min. Illumination B&W:** 0.005 Lux (F1.4, 1/4s (NTSC) or 1/3s (PAL), IR ON)  
**Lens:** 18x zoom f=4.1 ~ 73.8 mm / F1.4 (Wide)~ 3.0(Tele)  
**Diagonal Angle:** 48°(W)~2.8°(T)  
**Zoom Speed :** 2.1 sec. (1x to 18x)  
**Digital Zoom:** 1x ~ 12x variable  
**Synchronization System:** Internal / Line Lock  
**Day & Night:** Supported; with Mechanical IR Cut Filter  
**Motion Detection:** Supported (3 Windows)  
**Electronic Shutter:** 1/1 ~ 1/10,000 sec. (NTSC); 1/1 ~ 1/10,000 sec. (PAL)  
**Fixed Shutter:** Yes  
**Auto Slow Shutter:** Yes  
**BLC:** ON / OFF  
**AGC:** Auto / Manual  
**Auto Exposure Control:** Auto / Manual / Exposure compensation

**Exposure Compensation:** -10.5~+10.5dB (15steps)  
**White Balance:** Auto / Manual  
**Camera ID:** Max. 20 characters  
**Number of Preset:** 256 points  
**Auto Iris Control:** Auto / Manual  
**Sequence Group:** 8  
**Auto Pan (patrol):** 4  
**Schedule:** Yes  
**Privacy Mask:** 24  
**Absolute Position:** Yes  
**Cruise:** Yes  
**S/N Ratio:** Better than 50 dB (AGC off)  
**Pan/Tilt Manual Speed:** 1° ~ 90° / sec.  
**Pan/Tilt Preset Speed:** 5° ~ 400° / sec  
**Pan/Tilt Preset Accuracy:** 0.225° / 0.45°  
**Pan/Tilt Travel Range:** 360° endless / -10° ~ 100° (190° in Image Flip mode)

## Video and Software Specifications

### Video

**Compression:** MPEG-4 ASP compliant  
**Image Size:**  
Full D1 (720x480 in NTSC, 720x576 in PAL)  
CIF (352x240 in NTSC, 352x288 in PAL)  
QCIF (176x120 in NTSC, 176x144 in PAL)  
**Image Quality:**  
Full D1/ CIF/ QCIF  
**Bit Rate:** 28kbps ~ 3Mbps  
**Audio:** Two-way audio supported with 8kHz, Mono, PCM compression  
**Max. Frame Rate:**  
30fps at 720X480 - NTSC  
25fps at 720X576 - PAL

### Software

**Network Protocol:** TCP, UDP, IP, HTTP, DHCP, PPPoE, RTP, RTSP, FTP, SMTP, DNS, DDNS, NTP, ICMP, IGMP, ARP  
**WAN:** Dynamic IP/Static IP/PPPoE  
**SNTP/NTP:**  
Day & Time synchronize with SNTP/NTP server or manually define  
**Video Settings (per channel setting):**  
Setting up: Streaming Method/Audio/Multicast IP/Multicast TTL/IGMP/Analog Video/ Resolution/Bitrate/Frame Rate Mode/Frame Rate/Serial Port Baud Rate/ Serial Port Control/RTSP Port/Video RTP over Multicast/Audio RTP over Multicast/ Video Control Port/Video Streaming Port/Video Multicast Port  
**Video Adjust (per channel setting):**  
Motion detection setting  
Hug/Brightness/Saturation/Contrast adjust  
**Security:** User authorization needed for protecting camera access

## Ordering Information

**EDS-651N:** 18X Indoor Speed Dome Type IP Camera - NTSC  
**EDS-651P:** 18X Indoor Speed Dome Type IP Camera - PAL  
Wall Mounting Kit  
Flush Mounting Kit  
Corner Mounting Kit  
Pole Mounting Kit  
Vandal-Proof Cover