# **Compact B/W and Color Bullet Cameras TRUE Day/Night Bullet Camera**



A-S35CNV

A-S230CWX / A-S190SWX **SDN650** 

## Color and B&W Bullet

The A-S230CWX and A-S190SWX bullet style cameras are some of the smallest full-featured cameras available. The small size of the cameras, only 23mm in diameter for the color and 19mm for the B&W permits their use in a wide variety of CCTV applications, when covert or near covertness is required - such as residential applications or even in nightclubs or bars.

The cameras incorporate standardresolution CCDs (380TVL for color and 420TVL for B&W) with a 3.6mm fixed iris lens into a small and unobtrusive housing. The use in outdoor environments is discouraged.

The video and power connections to the cameras are a standard BNC connector and power pin for 15VDC operation. A BNC/power pin to RJ-11 adapter and 60-ft of RJ-11 cable for ADT system applications is included. All models include a wall mount.

#### **Color Day/Night Bullet**

The small size of the A-S35CNV bullet style camera - only 37mm in diameter including IR LEDs permits its use in a variety of CCTV applications. The camera incorporates a standard-resolution (380TVL) color CCD with a 6mm fixed iris lens into a small, unobtrusive and weather resistant housing with sunshield.

## **TRUE Day/Night Bullet**

The SDN650 bullet style camera features the SONY® HQ1 chip set and offers TRUE Day/Night capability with an automatic

switching IR filter. The camera offers 18 IR LEDs projecting IR illumination to nearly 50-feet. The camera incorporates a highresolution (520TVL) color CCD with 3.8-9.5 aspheric varifocal auto-iris lens into a 2.4" diameter by 5.71" long weather resistant housing with sunshield.

## **IR Illumination**

The built-in IR illumination allows the cameras to produce a black and white image in the absence of any visible light (0 lux condition). The IR illumination of the S35CNV provides coverage up to 10 meters (33-ft), and the SDN650 provides coverage up to 15 meters (50-ft). As conditions approach near darkness, the cameras automatically switch the IR LEDs on to illuminate the camera field of view. The SDN650 switches an internal IR filter out of the field of view offering a further improvement in low-light level viewing.

Note: Illumination performance is a function of reflective objects in the camera's field-of-view. Outdoor nighttime viewing is improved with the addition of external visible lighting.

The video and power connections to the cameras are a standard BNC connector and power pin for 15VDC operation (S230 / S190 / S35 only) and 12VDC operation (SD650 only). A BNC/power pin to RJ-11 adapter and 60-ft of RJ-11 cable for ADT system applications is included. All models include a wall mount. The cameras are quick and easy to install in a variety of indoor (or outdoor day/night only) applications.

#### **Features**

## Color / B&W

- Ultra compact size Color: .9" diameter X 2.9" long B&W: .75" diameter X 2.3" long
- 3.6mm wide angle fixed iris lens
- Anodized aluminum housing
- Rear-style swivel mount bracket included

## Color Day/Night

- Compact size 1.5" diameter X 3.6" long
- 6.0mm fixed iris lens
- AGC, ATWB & Backlight compensation
- Rain and fog resistant glass coating
- Weather resistant anodized aluminum housing and sunshield
- Bottom-style swivel mount bracket included

## TRUE Day/Night

- Small size 2.4" diameter X 5.71" long
- 3.8-9.5mm aspheric VF AI lens
- Automatic mechanical IR-Filter switch
- Weather resistant anodized aluminum housing and sunshield
- Top, bottom, rear-style swivel mount bracket included

## **Ordering Guide**

SCN# A-S230CWX Color Bullet Camera, 3.6mm lens

**A-S190SWX** Black and White Bullet Camera, 3.6mm

lens

Color Day/Night Bullet A-S35CNV Camera, w/6 LEDs, 6mm

TRUE Color Day/Night Bullet Camera, IR filter, **SDN650** 

w/18 LEDs, 3.8-9.5mm VF Al lens





## **Specifications**

**Image Sensor** 

1/3" IT CCD, 510 (H) x 492 (V) Pixels 1/3" IT CCD, 510 (H) x 492 (V) Pixels 1/3" IT CCD, 510 (H) x 492 (V) Pixels Color Bullet: **B&W** Bullet: Color Day/Night Bullet: 1/3" IT CCD, 768 (H) x 494 (V) Pixels TRUE Day/Night Bullet:

Resolution

> 380 Lines Color Bullet: **B&W** Bullet: > 420 Lines Color Day/Night Bullet: > 380 Lines TRUE Day/Night Bullet: > 520 Lines

Lens

Color Bullet: 3.6mm, fixed iris **B&W** Bullet: 3.6mm, fixed iris Color Day/Night Bullet: 6mm, fixed iris

TRUE Day/Night Bullet: 3.8-9.5mm VF, AI, IR, Aspherical

LED Illumination (Color Day/Night Only)

LED: 6-total, 10 meter beam

Wavelength: 850nm

Beam Length: 10 meters (~33-ft) Half angle: +/- 15 degrees

Sensor Detection Range: 10 lux min, 30 lux max, 15 lux avg

LED Illumination (TRUE Day/Night Only)

18-total, 15 meter beam LED:

Wavelength: 850nm

Beam Length: 15 meters (50-ft) Half angle: +/- 15 degrees

Sensor Detection Range: 1.5 lux min, 10 lux max, 5 lux avg

**Electronic Iris** 

1/60 ~ 1/100,000 Sec.

(TRUE Day/Night Bullet: 1/60 ~ 1/50,000 Sec.)

Minimum Illum.

Color Bullet: 0.5 lux, F2.0 **B&W** Bullet: 0.05 lux, F2.0 Color Day/Night Bullet: 0.0 lux (İR LEDs on) TRUE Day/Night Bullet: 0.0 lux (IR LEDs on)

Video Output

1.0Vp-p (75-ohms), 6-pin modular, Video BNC

**Camera Connectors** 

BNC / Power (RJ-11 adapter included) 60' RJ-11 camera cable included

**Dimensions** 

Color Bullet: 0.9" dia. x 2.9" (23mm dia. x 74mm) 0.75" dia. x 2.3" (19mm dia. x 60mm) 1.5" dia. x 3.6" (37mm dia. x 92mm) 2.4" dia. x 5.7" (60mm dia. x 145mm) **B&W** Bullet: Color Day/Night Bullet: TRUE Day/Night Bullet:

**Power** 

15 VDC, 1.5 w (max) Color Bullet: 15 VDC, 1.5 w (max) 15 VDC, 3.0 w (max) 15 VDC, 6.0 w (max) **B&W** Bullet: Color Day/Night Bullet: TRUE Day/Night Bullet:

**Operating Temperature** 

14°F ~ 122°F (-10°C ~ +50°C) 14°F ~ 122°F (-10°C ~ +50°C) Color Bullet: B&W Bullet: Color Day/Night Bullet:  $-4^{\circ}F \sim 122^{\circ}F (-20^{\circ}C \sim +50^{\circ}C)$ -4°F ~ 122°F (-20°C ~ + 50°C) TRUE Day/Night Bullet:

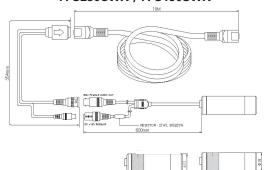
**Environmental** 

TRUE Day/Night Bullet IP67 rated

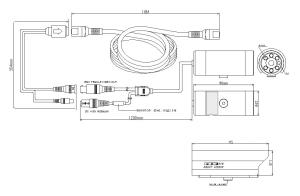
## **Optional Accessories**

| A-A18C   | 60' Camera cable                |
|----------|---------------------------------|
| A-A30C   | 100' Camera cable               |
| A-A60C   | 200' Camera cable               |
| A-A90C   | 300' Camera cable               |
| A-MA800  | Modular cable adapter           |
| A-LA800  | Line Amplifier, for camera runs |
|          | over 300'                       |
| A-AB50C  | 50' Cable, BNC to BNC           |
| CONKIT4C | 4-ch A/V Interface              |

#### A-S230CWX / A-S190SWX



#### A-S35CNV



#### **SDN650**

