

# A7-180 Camera

Scallop Imaging's A7-180 video camera uses a 7 Megapixel staring array to produce 180°x 48° field of view, non-fisheye, panoramic video. Its staring array has the resolution (i.e., pixels on target) of 23 standard VGA cameras.

The A7-180's internal imaging engine presents the user a 180° view plus up to three 8X zoom detail views packaged into one NTSC frame that is sent over any standard CCTV analog network.

#### The benefits are:

- Plug-and-play replacement of existing analog cameras;
- One A7-180 can replace multiple fixed and PTZ cameras;
- Each of the zoom details is under independent control using standard Pelco-D commands over RS485;
- The camera is solid state, meaning no moving parts to fail and require service;
- The extreme resolution, detail views can be positioned anywhere within the 180° field of view;
- The output of the digital imaging engine that can be viewed and recorded over standard CCTV analog network, thus extending the capability and expanding the useful life of existing analog infrastructure.



Full 180° SAW above with  
three detail windows below.



**Full 180° Situational Awareness Window (SAW) above with one detail window below.**



**Full 180° SAW above with two detail windows below.**



**Full 180° SAW above with three detail windows below.**

**SPECIFICATIONS:**

**DIGITAL WINDOW A7-180 CAMERA**

**Camera:**

Image Device	(5) 1.3 Mpixel CMOS
Number of effective pixels	6,553,600 pixels
Shutter	Electronic rolling shutter
Gain control	Automatic Gain Control
Exposure control	Average, 5 zone independent
Depth of field	2 feet to infinity
Minimum illumination	.5 Lux
Zoom	8X optical zoom

**Image sensor array:**

Staring array image size	5120x1280 pixels
Field of view	180° x 48°
Maximum frame rate	15 fps
Output pixels	640x480 NTSC, 768x576 PAL

**Output frame formats:**

640x480 frame can be formatted using preconfigured presets:

Preset 1:	180° Situational Awareness Window (SAW) + 1 zoom window
Preset 2:	180° SAW + 2 zoom windows
Preset 3:	180° SAW + 3 zoom windows
Preset 4:	4 zoom windows
Preset 5:	1 zoom window

Zoom window positions and magnifications are controlled using Pelco-D commands over RS-485, or using the PC setup application.

**Output video:**

Output horizontal resolution	480 TVL
Analog video output	BNC, 1V p-p 75Ω
Video format	NTSC / PAL

**Camera set up:**

PC application with USB 2.0 cable connected to camera

**Communication:**

RS-485

**Protocol supported:**

Pelco D

**General:**

Weight	8 oz. (228g)
Dimensions	3.28x5.72x2.49 inches (83 x 125 x 63 mm)
Power requirements	12V DC, 24V DC, 24V AC
Power consumption	4.5W
Operating temp.	-40°F to 140°F (-40°C to 60°C)
Storage temperature	-40°F to 185°F (-40°C to 85°C)

**Supplied accessories:**

- Surface mounting kit
- Angled mounting kit
- ¼" 20 thread adapter mounting plate

**Optional accessories**

- Ceiling mount kit
- Vandal resistant housing
- Outdoor housing

**Warranty:**

24 months



[www.scallopimaging.com](http://www.scallopimaging.com)