

# I98-K1

2MP 33x Outdoor PTZ with IR LED 200m,  
WDR 145dB



- Taiwan IoT Cybersecurity Certification
- Endless Pan & Tilt, PTZ Auto Tracking

## ► Specifications

### Product Profile

Product Type	PTZ
Application Environment	Outdoor
Maximum Resolution	2MP
Image Sensor	Progressive Scan CMOS
Sensor Size	1/2.8 "
Effective Pixels	1944(H) X 1224(V) (2.38 MP)
Day / Night	Yes
Low Light Sensitivity	Extreme
Minimum Illumination	Color: 0.002 lux at F1.55 (30 IRE); B/W: 0.001 lux (IR LED on)
Mechanical IR Cut Filter	Yes
IR Sensitivity Range	700-1100nm
IR LED	Adaptive IR LED x 8 (850 nm)
IR Working Distance	200m
Color to B/W Switch	ISP based switch, configurable
Electronic Shutter	1-1/32000 second (manual mode); 1-1/32000 second (auto mode)

Horizontal Resolution (TV Lines)	1800 TVL
S/N Ratio	75 dB

### Lens

Focal Length	Zoom, f4.8-148.5mm
Aperture	F1.55-F5.0
Zoom Ratio	33x optical zoom, 16x digital zoom
Zoom Speed	2.7 second (wide to tele)
Zoom Application	Camera Installation, Auto Zoom by Event, Manual Operation
Iris	DC iris
Focus	Auto focus
Lens Mount	Board mount
Horizontal Viewing Angle	69.3° - 3°
Vertical Viewing Angle	38° - 1.7°

### PTZ

Scan Panning / Tilting Speed	0.16° - 32°/second, 0.16° - 16°/second
Manual Panning / Tilting Speed	0.16° - 54.4°/second, 0.16° - 27.2°/second
Preset Panning / Tilting Speed	0.16° - 300°/second, 0.16° - 150°/second
Panning Range	360° endless
Tilting Range	-20°~200°
PTZ Control	Remote manual control, Speed Control, Select box to PTZ, 256 preset points, 10 preset tours, Auto scan
Preset Accuracy (Panning/Tilting)	±0.265°/±0.265°
Absolute Position	Yes
Pan, Tilt or Zoom protocol	Visca, Pelco-D, Pelco-P, ACTi URL command

### Video

Compression	H.264 (Baseline/ Main/ High profile), MJPEG
Maximum Frame Rate vs. Resolution	60 fps at 1920 x 1080 60 fps at 1280 x 720 30 fps at 640 x 480 30 fps at 320 x 240
High Frame Mode	Support
Bit Rate	128Kbps - 12Mbps
Bit Rate Mode	Constant, Variable
Multi-Streaming	Simultaneous triple streams based on configurations of video resolution, compression format, and frame rate
Digital Noise Reduction	2D + 3D DNR
Wide Dynamic Range	Extreme WDR (145 dB)
Image Orientation	Flip, Mirror

Image Enhancement	White Balance, Brightness, Contrast, Sharpness, Automatic gain control (AGC), Flickerless, Digital Image Stabilizer (DIS, EIS), Defogging
Privacy Mask	20 configurable 3D privacy masks
Text Overlay	Yes
On-Screen Graphics (Picture Overlay)	Yes
Built-in Analytics	Basic Face Detection, Object Based Motion Detection, Tampering Detection, Shock Detection, PTZ Auto Tracking, Object Line Crossing Detection, Object Enter Area Detection, Missing Object Detection, Unattended Object Detection, Object Loitering Detection

## Audio

Audio Type	2-way, Line-in, Line-out
Audio Compression	8 kHz, 16 bit encoding, Mono, PCM, G.711

## System

System Monitor	CPU loading, memory usage and network statistics via API
----------------	--

## Interface













Digital Input/Output	4/2
Operating Button	Reset Button

## General

Power Source	DC 48V, AC 24V, High PoE 60W
Power Consumption	50 W (PoE, heater, fan and IR on), 62 W (AC, heater, fan and IR on)
Weight	3120g (6.88lb)
Dimensions	(Ø x H): 170mm x 260mm (6.69" x 10.23")
Environmental Casing	Weatherproof (IP66), Vandal proof metal casing (IK10), Built-in dehumidifier, Scratch-resistant and water-repellent lens glass
Corrosion Protection	Yes
Starting Temperature	-40°C ~ 55°C (-40°F ~ 131°F) within 30 minutes
Operating Temperature	-40°C ~ 55°C (-40°F ~ 131°F)
Operating Humidity	10% - 85% RH, non-condensing
Approvals	CE Class B, FCC Class B, IP66, IK10 (metal casing), Taiwan IoT Cybersecurity Certification Level 2 (TCA)
Real-time Clock (RTC)	Yes
Warranty	3 Year(s) (1 year in continuous motion). For extended warranty offering, see <a href="http://www.acti.com/support/warranty">http://www.acti.com/support/warranty</a>

## ▶ Related Products

### Mounting Accessories - Camera Mount

PMAX-0102		Straight Tube
PMAX-0103		Straight Tube with Bracket
PMAX-0104		Extension Tube
PMAX-0302		Gooseneck with Bracket
PMAX-0303		Gooseneck
PMAX-0305-K1		Heavy Duty Wall Mount w/ endurance coating (for I915-K1, B915-K1)
PMAX-0312		PTZ Wall Mount for Outdoor PTZ / Speed Dome (except KCM-8211 & TCM-6630)
PMAX-0402		Corner Mount
PMAX-0503		Pole Mount (for PMAX-0102, PMAX-0312, PMAX-0313, PMAX-0314, PMAX-0702, PMAX-1106, PMAX-1107), supports 5.25" to 8.5" Poles
PMAX-0702		Junction Box for PTZ and Dome Cameras
PMAX-0807		Gangbox Converter (for PMAX-0102, PMAX-0312, PMAX-0313, PMAX-0314, PMAX-0321), supports Two-Gang Boxes
PMAX-0808		Converter Ring, 1.5" NPT for Third-Party Mounting Accessories

**Note:** Some mounting accessories may need additional accessories for installation. Please check [www.acti.com/mountingselector](http://www.acti.com/mountingselector) for more information.