



**stats sa**

Department:  
Statistics South Africa  
REPUBLIC OF SOUTH AFRICA

## **PTZ camera (Qty x 3)**

**Technical specifications** for a versatile PTZ camera specifically built for high-performance broadcasting and conferencing:

### Camera & Lens Parameters

- Image Sensor: Progressive CMOS, 2.07 Effective Megapixels.
- Resolution: Up to 1920x1080p at 60fps.
- Optical Zoom: 20x optical zoom with an additional 16x digital zoom.
- Focal Length: f=5.2mm (wide) to 104mm (tele).
- Aperture: F1.55 – F3.13.
- View Angle:
  - Horizontal: 58.7° (wide) to 3.2° (tele).
  - Vertical: 32.2° (wide) to 1.8° (tele).
- Minimum Illumination: 0.1 Lux @ (F1.5, AGC ON).
- Digital Noise Reduction: 2D & 3D DNR; S/N Ratio ≥50dB (up to 55dB in some conditions).

### Pan, Tilt & Presets

- Pan Range: 355° total movement.
- Tilt Range: -30° to +90°.
- Rotation Speed:
  - Pan: 1°/s to 80°/s.
  - Tilt: 1°/s to 60°/s.
- Presets: 9 via IR remote; up to 255 via joystick or PC interface.

### Connectivity & Protocols

- Physical Interfaces:
  - Video: HDMI (v1.4), 3G-SDI, USB 3.0 (Type-B), LAN (RJ45).
  - Audio: 3.5mm Line In.
  - Control: RS232 (In/Out), RS422/RS485.
- Network Protocols: NDI|HX2 (optional), SRT, RTSP, RTMP, RTMPS, ONVIF, HTTP, TCP/IP.
- Video Compression: H.264, H.265 (LAN); YUY2, MJPEG (USB).
- Control Protocols: VISCA (including VISCA over IP), Pelco-D, Pelco-P.

### Physical & Power

- Input Voltage: DC 12V / 1.5A.
- Power Consumption: Max 18W.

- PoE Support: 802.3af standard (Optional feature).
- Dimensions: 134mm (W) x 174mm (D) x 187mm (H).
- Weight: Approx. 1.2kg.

## **Portable all-in-one live streaming kit: (Qty x 1)**

### **Technical Specifications**

#### Video Inputs & Formats

- Total Channels: 5 channels (4 physical + 1 selectable source).
- Physical Inputs: 4 x HDMI (Type A) and 4 x SDI (BNC). Users select one or the other for each of the four physical channels.
- Auxiliary Input: 1 selectable source (NDI|HX, UVC USB-C camera, or internal media player).
- Input Resolutions:
  - 1080p: 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 fps.
  - 1080i: 50, 59.94, 60 fps.
  - 720p: 50, 59.94, 60 fps.
- Colour Processing: 10-bit 4:2:2 YCbCr and 8-bit 4:4:4 RGB

#### Video Outputs

- HDMI Outputs: 2 x HDMI (configurable for PGM, PVW, Multiview, or direct input monitoring).
- USB Output: 1 x USB-C (UVC) supporting up to 1080p30 for webcam-style output to OBS or Zoom.
- Direct Streaming: Integrated Ethernet port for simultaneous RTMP streaming to up to 3 platforms.

#### Audio Processing

- Inputs: 2 x 3.5mm TRS microphone/line-level inputs.
- Outputs: 1 x 3.5mm headphone jack for real-time monitoring.
- Internal Mixer: 7-channel digital mixer with controls for gain, balance, delay, and effects (compressor, EQ, noise gate).

#### Integrated Monitor

- Size: 14 inches.
- Resolution: 1920 x 1080 (Full HD).
- Brightness: 350 cd/m<sup>2</sup> (nits).

#### Recording & Storage

- Format: H.264 recording at up to 70 Mb/s.
- Media: Supports SD cards (ExFAT) or external USB 2.0/3.0 SSDs.

#### Physical & Environmental

- Dimensions: 366 x 300 x 113 mm.
- Weight: ~5 kg (approx. 11 lbs).
- Power Consumption: 12W.
- Power Inputs: 12V DC, AC power (100–240V), or USB-C PD power bank.
- Operating Temp: 5°C to 40°C (41°F to 104°F)
- 

**NB:** The unit must be compatible with platforms such as YouTube, Facebook, and Twitter

## **Wireless mic system (Qty x 3)**

Detailed technical specifications for a dual-channel wireless microphone

### Key Features

- **Dual-Channel Receiver:** The RX8 Pro receiver can work with two transmitters simultaneously, though the K1 kit specifically includes only one.
- **UHF Frequency:** Operates on 48 selectable UHF channels to help avoid interference.
- **Operating Range:** Delivers reliable signal transfer up to 100m (300ft) without obstacles.
- **Battery Life:** Both the transmitter and receiver are powered by 2x AA batteries, offering over 6 hours of continuous operation.
- **Monitoring:** The receiver includes a 3.5mm headphone jack for real-time audio monitoring

## **PTZ camera controller (Qty x 1):**

### Detailed specifications

#### Control & Capacity

- **Camera Capacity:** Controls up to 1,000 cameras.
- **Preset Support:** Supports up to 255 presets for saved camera positions.
- **Camera Shortcuts:** 7 dedicated buttons for instant camera switching.

#### Hardware & Interface

- **Joystick:** 4D precision joystick for variable-speed pan, tilt, and zoom.
- **Display:** 3-inch LCD color screen for menu navigation and status monitoring.
- **Knobs:** 3D parameter knobs for fine-tuning exposure, white balance, and focus.
- **Buttons:** Silicone backlit keys (red/white) with a tactile "click" and optional prompt tones.
- **Customization:** 2 programmable function keys (F1 and F2).

#### Connectivity & Protocols

- **Network (IP):** NDI®|HX2, VISCA Over IP, VISCA TCP, and ONVIF.
- **Serial (Legacy):** RS-232, RS-422, and RS-485 using VISCA, Pelco-D, or Pelco-P.
- **Preview Support:** Real-time PVW (preview) over the network via NDI®|HX2 and RTSP.
- **Tally:** Supports up to 8 channels for "on-air" signalling.

#### Power & Physical Specs

- **Power Options:** Supports PoE (802.3af) via Ethernet or a 12V DC (0.25A) power supply.
- **Power Consumption:** Rated at a low 3W.

- Dimensions: 332mm x 136mm x 58mm (height reaches 116mm including the joystick).
- Weight: Lightweight design at approximately 0.8 kg.
- Temperature Range: Operates between -10°C and 40°C.

### **4K HDMI wireless video transmission system (Qty x 3)**

#### Key Specifications (Transmitter)

- Video Input/Output: HDMI 1.4b input, HDMI 1.4b loop output.
- Resolution Support: Up to 4K/30fps, 1080p/60fps, 1080i/60fps, 720p/60fps.
- Transmission Range: Up to 1,300 ft (400 m) line-of-sight (LOS).
- Broadcast Range: Up to 650 ft (200 m) LOS (1 TX to 4 RX).
- Latency: As low as 60 ms.
- Frequency Bands: 2.4 GHz and 5 GHz (Dual Band).
- Bandwidth: 20 MHz / 40 MHz (Automatic Frequency Hopping).
- Video Coding: H.264.

#### Physical & Power

- Weight: 192 g (6.8 oz).
- Dimensions: 109 x 62.3 x 33.4 mm (4.3 x 2.5 x 1.3 in).
- Power Input: 6–16 VDC (2.0mm barrel), NP-F battery mount, USB-C (5V/2A).
- Power Consumption: < 7W (Transmitter).

#### Notable Features

- UVC Streaming: Allows direct plug-and-play streaming to a computer without capture cards.
- Smart Channel Scan: Automatically selects the best frequency channel on startup.
- Broadcast Mode: Supports 1 Transmitter to 4 Receivers (or 2 Receivers and 2 Apps).
- Modes: Features HD Mode (better image, higher bitrate) and Smooth Mode (lower latency)

### **90W bi-colour LED panel Studio light (qty= 1)**

#### Optical & Photometric Data

- LED Count: 480 edge-mounted SMD LEDs.
- Illuminance: 2200 Lux at 1 meter (centre).
- Color Temperature: 2700K – 6500K continuously adjustable.
- Color Rendering: CRI Ra 98, TLCI 99.
- Beam Angle: 70° (50% bounded).
- Dimming: 0–100% flicker-free PWM digital dimming.

#### Power & Input

- Power Consumption: Approximately 90W.

- Working Voltage: DC 11V – 36V wide input.
- Power Connectors:
  - DC Input: 4-pin XLR socket.
  - Battery Plate: Standard V-mount (Gold mount optional).
- Battery Compatibility: Supports IP54-rated for full waterproof operation.

#### Control & Interface

- Control Ports: 5-pin DMX in/out.
- Control Protocols: DMX512 and Interaction control (master/slave mode).
- Quick Adjustments:
  - Brightness: Click the dimmer knob to switch between 1% and 10% steps.
  - CCT Stepping: 2700K, 3200K, 4500K, 5600K, 6500K.
- LCD Display: Shows dimmer percentage, CCT value, DMX channel, and remaining battery life.

#### Physical Specifications

- IP Rating: IP54 (rainproof at any angle).
- Dimensions: 650 × 403 × 48 mm.
- Lighting Area: 526 × 257 mm.
- Weight: 4.75 kg (net weight) to 4.8 kg.
- Housing: Strong all-metal with a U-stand mount

### **Teleprompter (qty =1)**

#### Core Hardware Specifications

- Beam Splitter Glass: 11-inch (28 cm) HD glass with 75% light transmission and multi-coating to prevent ghosting.
- Integrated Monitor (TM8): 9-inch HD LCD display with 1024 x 768 native resolution and a brightness of up to 826 nits for clear visibility in bright studio settings.
- Main Material: High-grade plastic body with metal camera mounting components.
- Weight: Approximately 1,400 grams (3.1 lbs) for the full unit.
- Power Consumption: 10W total power draw via 5V/2A USB-C input.

#### Mounting & Compatibility

- Camera Support: Features an Arca-type quick-release plate with a 1/4" screw, supporting a maximum payload of 2 kg (4.4 lbs).
- Adjustment Range: The camera mount offers 10 cm of horizontal travel and 3 cm of vertical elevation for precise lens centering.
- Lens Compatibility: Supports focal lengths from 35mm to 200mm and filter thread sizes up to 72mm.
- Device Mounting: Includes a phone clamp fitting smartphones up to 8.5 cm wide.

- **Accessory Mounting:** Two integrated cold shoe mounts for attaching microphones or small LED lights.

#### Connectivity & Display Features

- **Display Modes:** Functions as a secondary computer monitor (Windows/macOS) via USB-C or Mini HDMI.
- **Mirroring:** Supports plug-and-play screen mirroring from smartphones and tablets that support DP (DisplayPort) protocol.
- **On-Device Controls:** A built-in toggle button allows for manual brightness adjustment and instant image de-flipping (horizontal/vertical) directly on the monitor.
- **Reading Distance:** Optimized for a reading range of up to 2.5 meters (8.2 feet)