

# 20X Optical Zoom Video Conference Camera

# RC820











# ▼ 1080P Full HD

Apply Panasonic's 1/2.8 inch, 2.07 million effective pixels high quality HD CMOS sensor, can reach maximum 1920 x 1080 high resolution and achieve quality image.

#### ▼ Supports NDI HX,HX2

The camera can connect directly to a NDI<sup>®</sup> network, utilizing NDI-based video production workflows without additional configuration, reducing cost and set-up time.

#### ▼ AAC Audio Encoding

Support AAC audio encoding, better sound quality and smaller bandwidth.

#### Abundant & Perfect Interface

It supports HDMI, 3G-SDI interface, effective transmission distance up to 150 meters (under 1080P30). HDMI, SDI, Network can output at the same time. It also support CVBS interface.

#### ▼ 20x optical zoom + 16x digital zoom

Using a high-quality super telephoto lens, the optical zoom reaches 20X and supports 16X digital zoom.

#### ▼ Local Storage

Support local storage module, directly recording to local USB flash disk without NVR.

### **▼** Low-light

High SNR of CMOS sensor combined with 2D and 3D noise reduction algorithm, effectively reduce the noise, even under low illumination conditions, picture can still keep clean and clear.

#### **▼** H.265 Support

The first H.265 encoding support conference video camera in the world, enabling full HD 1080p/60fps video stream by ultra-low bandwidth.

## **▼** Remote Control

Using RS232/485 interface, all the parameters of the camera can be remote controlled by the high-speed communications.

# ROCWARE



# **SPECIFICATIONS**

## **▼** CAMERA

| V OTHERU                     |   |
|------------------------------|---|
| Signal System                | HD: 1080p/60, 1080p/50, 1080i/60, 1080i/50, 1080p/30, 1080p/25, 720p/60, 720p/50, 720p/30, 720p/25 SD: 480i, 576i |
| Sensor                       | 1/2.8", CMOS, Effective Pixel: 2.07M  |
| Scanning Mode                | Progressive   |
| Lens                         | 20x, f4.42mm ~ 88.5mm, F1.8 ~ F2.8  |
| Minimal Illumination         | 0.5Lux @ (F1.8, AGC ON)   |
| Shutter                      | 1/30s ~ 1/10000s  |
| White Balance                | Auto, 3000K/Indoor, 4000K,<br>5000K/Outdoor, 6500K_1, 6500K_2,<br>6500K_3, One Push, Manual                       |
| Backlight<br>Compensation    | Support   |
| Digital Noise<br>Reduction   | 2D&3D Digital Noise Reduction   |
| Video S/N                    | ≥55dB   |
| Horizontal Angle of View     | 60.7° ~ 3.36°   |
| Vertical Angle of View       | 34.1° ~ 1.89°   |
| Horizontal Rotation<br>Range | ±170°   |
| Vertical Rotation<br>Range   | -30° ~ +90°   |
| Pan Speed Range              | 1.7° ~ 100°/s   |
| Tilt Speed Range             | 1.7° ~ 69.9°/s  |
| H & V Flip                   | Support   |
| Image Freeze                 | Support   |
| PoE                          | Support   |
| Local Storage                | Support   |
| Number of Preset             | 255   |
| Preset Accuracy              | 0.1°  |
|                              |   |

#### **▼ IPC FEATURES**

| Video Compression         | H.265/H.264/MJEPG   |
|---------------------------|---|
| Video Stream              | Main Stream, Sub Stream   |
| Main Stream<br>Resolution | 1920x1080, 1280x720, 1024x576   |
| Sub Stream<br>Resolution  | 720x576, 720x480, 320x240   |
| Video Bit Rate            | 128Kbps ~ 8192Kbps  |
| Bit Rate Type             | Variable Rate, Fixed Rate   |
| Frame Rate                | 50Hz: 1fps ~ 50fps,<br>60Hz: 1fps ~ 60fps                                 |
| Audio Compression         | AAC   |
| Audio Bit Rate            | 96Kbps, 128Kbps, 256Kbps  |
| Support protocols         | NDI®IHX, NDI®IHX2, TCP/IP, HTTP, RTSP, RTMP, Onvif, DHCP, Multicast, etc. |

## **▼** INPUT / OUTPUT INTERFACE

| Audio Interface            | 1-ch: 3.5mm Audio Interface, Line In   |
|----------------------------|--|
| SD Output                  | 1 x CVBS: 3.5mm RCA jack,<br>1Vp-p, 75Ω  |
| HD Output                  | 1 x HDMI: Version 1.3  |
|                            | 1 x 3G-SDI: BNC type, 800mVp-p, 75 $\Omega$ . Along to SMPTE 424M standard                   |
| Communication<br>Interface | 1 x RS485: 2pin phoenix port,<br>Max Distance: 1200m,<br>Protocol: VISCA / Pelco-D / Pelco-P |
|                            | 1 x RS232 IN: 8pin Min DIN,<br>Max Distance: 30m,<br>Protocol: VISCA / Pelco-D / Pelco-P     |
|                            | 1 x RS232 OUT: 8pin Min DIN,<br>Max Distance: 30m,<br>Protocol: VISCA network use only       |
| Network Interface          | 1 x RJ45: 10M/100M Ethernet Interface  |
| USB Interface              | 1 x USB2.0: Type A female jack   |
| Power Jack                 | JEITA type (DC IN 12V)   |



#### **▼** GENERAL SPECIFICATION

| Tally Indicator          | 1 (Red and Green colors)     |
|--------------------------|------------------------------|
| Power Indicator          | 1 (Blue)                     |
| Status Indicator         | 1 (Green)                    |
| Input Voltage            | DC 12V / PoE (802.3af)       |
| Power Consumption        | 1.0A (Max)                   |
| Operating<br>Temperature | -10°C ~ 40°C (14°F ~ 104°F)  |
| Storage Temperature      | -40°C ~ 60°C (-40°F ~ 140°F) |
| Power Consumption        | 12W (Max)                    |
| Size                     | 152 x 142 x 177 (mm)         |
| Net Weight               | 1.35Kg (3.0lb)               |