e-PRO

# CR-5000

## Hybrid Laboratory Solutions

As a new generation 4K recording and broadcasting core, it delivers high-performance processing, AI-driven graphics, and smooth control, meeting demands for intelligent audio and video capture.

- Embeded self-develop recording anf broadcasting motherboard and system
- Built in 30W high performance speaker. (Optional)
- Practical recording and broadcasting
- High performance energy storage power supply
- Replaceable and removable design

## Transform the Learning Experience

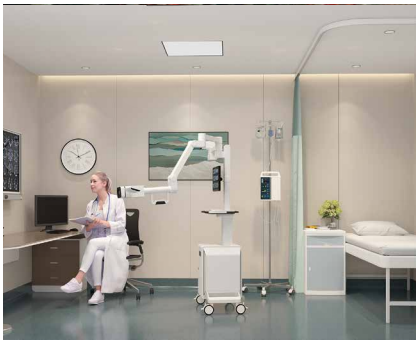
- Optimized for Hybrid Environments
- Provide Engaging Experiences
- Advanced, But Uncomplicated Technology
- Solutions in Action

## Core Technology

- Self developed intelligent manufacturing.
- Physics simulation engine Integrated
- Virtual background matting technology.
- Image rendering engine Integrated
- Intelligent image processing.
- High Performance of AI Intelligent computing

# Practical Scenarios

The mobile training recording vehicle can be applied to various types of vocational schools, such as automotive repair and maintenance, medical and health, fine arts, clothing, fashion design, performing arts, culinary arts, film and television production, service industries (aviation, catering services), welding and mold making, etc., to achieve visualized digital teaching applications for practical training.

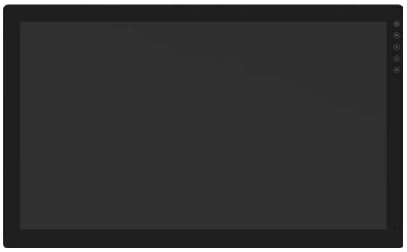


# SPECIFICATION

## 4K Recording &Broadcasting Host

| Display | |
|---|---|
| Type | 4K |
| Display area | 527.04(H)×296.46(V) mm |
| Resolution | 1920x1080 FHD |
| Pixel Distance | 0.2745x 0.2745 mm |
| Brightness Typical | 250 cd/m² (Typ.) |
| Constact Typical | 1000:1 (Typ Typ) |
| Respond Time | 14 (Typ.)(G to G) ms |
| Visible Angle | 89/89/89/89 (Typ.)(CR≥10) |
| Colour | 16.7M (66-bit + Hi Hi-FRC) |
| **Touching Display** | |
| Size | 23.8 inch PCAP |
| Touching point support | 10 points |
| Hardness of Display | 6H |
| Operating Voltage | 5V |
| Interface | USB |
| Operation System | Windows 7 or above/Android/MAC |
| **Physical Description** | |
| Holder in the back | Adjust Angle Angle：15°-85° |
| Physical Dimension | 583.2*356.8*48.4mm without holder in the buttom |
| Operating Surrounding | 0~40 40° C, 20~80%RH (None dew) |
| Interfaces | Dc(Power Supply)/Type-C 3.1/Hdmi+Vga/Usb2.0 Usb2.0（B） |
| Bonding | Full bonding |
| **Accessory** | |
| Power adapter | External Power Adapter(Input 100 100-240VAC,50/60Hz, Output12VDC 3A) |
| Power cable | 1.5m AC power cable |
| Signal Cable | HDMI 1.5m |
| Data Cable | USB2.0（A）To USB2.0 USB2.0（B）1.5m |

## 23.8 Inch Touch Display



| Display | |
|---|---|
| | 527.04(H)×296.46(V) mm |
| Display area | 1920x1080 FHD |
| Type | 0.2745x 0.2745 mm |
| Resolution | 250 cd/m² (Typ.) |
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| Visible Angle | |
| | **Touching Display** |
| Colour | 23.8 inch Display |
| Touching point support | 10H |
| Size | 6H |
| Hardness of Display | 5V |
| Operating Voltage | USB |
| Interface | Window 7 or above/Android/MAC |
| Operation System | |

## Dante AV

| Description of Len | |
|---|---|
| Image sensor | High-quality 4K CMOS sensor with a size of 1/2.8 inch. |
| Effective Pixels | 851M、16：9 |
| Signal of Video | **HDMI Interface video format:** 3840*2160P30/25;1080P60/50/30/25/59.94/29.97;720P60/50/59.94fps; **3G SID Interface video format:** 1080P60/50/30/25/59.94/29.97;720P60/50/59.94fps; **LAN Interface video format:** H264;3840*2160P30/25;1080P60/50/30/25/59.94/29.97;720P60/50/59.94fps; |
| Optical Zoom | 12X |
| FOV | 7.42°（T）~78.58°（W）（D）6.48°（T）~70.82°（W）（H）3.66°（T）~42.72°（W）（V） |
| Aperture Scale(F) | F1.6 – F2.8 |
| Minimum illumination | 0.5Lux(F1.8, AGC ON) |
| DSP | 2D & 3D |
| White Balance | Manual/Automatic/One-touch white balance/Specified color temperature |
| Focus | Auto/manual/one-key focus, supporting TOF laser ranging module, assisting focusing. |
| Aperture\Shutter speed | 1/25-1/20000、Auto/Manual |
| Backlight Compensation | On/OFF |
| Dynamic range | Adjustment of Relationship/Dynamic Levels |
| Video Adjustment | Brightness, chroma, saturation, contrast, sharpness, black and white mode. |
| S-N-R | ≥50dB |
| Physical button | Zoom In Zoom Out、Brightness+、Brightness-Feozen、Mode Selection、Menu |

| Interface Description | |
|---|---|
| Video Input | HDMI、SDI、LAN |
| Audio Input | Line IN |
| Image Data Rate | Dual Stream Out put |
| Control Interface | RS485，2PIN Phoenix，Support VISC protocal |
| Video Compression Format | H.264 |
| LAN Interface | 100M（10/100BASE-TX）PoE，Audio output supported |
| Network Protocal | RTSP、RTMP、ONVIF、GB/T28181；Support VISCA Network control protocal；OTA upgrade、Remote Reboot、Remote Reset |
| Power Socket | 5.0(DC12V) |
| Power Adapter | Input AC110V-AC220V;Output DC12V/2A |
| Input Voltage | DC12V±10% |
| Size | 157.7（L）mm×73.3mm（W）×85mm（H） |
| Weight | 690g |

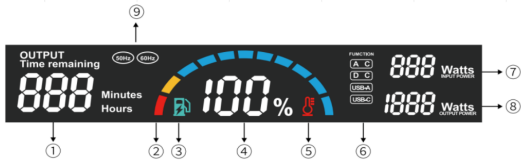
# 4K HD PTZ Camera

| Description | |
|---|---|
| Sensor | 1/2.5 inch, CMOS, Effictive Pixel: 8.51Megapixel |
| Scan Mode | Per line |
| Len | 12x, f = 4.4mm ~ 52.8mm, F1.8 ~ F2.6 |
| Optical Zoom | 16x |
| Minimum illumination | 0.5Lux @ (F1.8, AGC ON) |
| Shutter Speed | 1/30s ~ 1/10000s |
| White Balance | Automatic,Indoor,Outdoor,One click,Manually. |
| Backlight Compensation | Support |
| DSP | 3D |
| SNR | >=55dB |
| Horizontal FOV | 71° ~ 8.2° |
| Vertical FOV | 42.7° ~ 4.5° |
| Horizontal rotation range | ±170° |
| Virtical rotation range | -30° ~ +90° |
| Horizontal rotation speed | 1.7° ~ 100°/s |
| Virtical rotation speed | 1.7° ~ 69.9°/s |
| Horizontal&Virtical Rotation | Yes |
| Image Frozen | Yes |
| PoE | Yes |
| Preset position spots | 255 |
| Pricise of preset postion | 0.1° |
| **Network Characteristics** | |
| Video Coding Standard | H.265/H.264/MJPEG |
| Video Data Rate | 1st code streaming、2nd code streaming |
| 1st code streaming ratio | 3840x2160, 1920x1080, 1280x720, 1024x576,etc |
| 2nd code streaming ratio | 720x576, 720x480, 320x240,etc. |
| Video code streaming(H264) | Max 60Mbps |
| Video code streaming (MJPEG) | Max 300Mbps |
| Rate Control | VBR,CBR |
| Frequency | 50Hz: 1fps~50fps, 60Hz:1fps~60fps |
| Audio compression standard | AAC、G711A |
| Audio Coding Rate | 96Kbps, 128Kbps |
| Protocal support | NDI®\|HX,SRT,TCP/IP,HTTP,RTSP,RTMP/RTMPS,Onvif,DHCP,Multicast |

| Interface | |
|---|---|
| HDMI Output | 1, HDMI verison:1.4b |
| | Video Format: 4K@25/30/29.97fps; 1080P@25/30/50/60/59.94/29.97fps; 1080I@50/60/59.94fps; 720P@50/60/59.94fps |
| SDI-3G Output | 1, 3G-SDI: BNC Type, 800mVp-p, 75Ω,Standarized as SMPTE 424M |
| | Video Format: 1080P@25/30/50/60/59.94/29.97fps; 1080I@50/60/59.94fps; 720P@50/60/59.94fps |
| Network Interface | 1, RJ45: 10M/100M/1000M Adaptive Ethernet |
| Audio Interface | 1, Line In, 3.5mm; |
| | 1, Line Out, 3.5mm; |
| USB port | 1, USB2.0(A) |
| Tele-Interface | 1, RS232 In: 8 pin small DIN,Max transimit distance 30m, VISCA/Pelco-D/Pelco-P Protocal supported |
| | 1, RS232 Out: 8 pin small DIN,Max. transimit distance 30m, VISCA protocal network building. |
| | 1, RS485: 2 cores phoenix cresnet,Max. transimit distance: 1200m, VISCA/Pelco-D/Pelco-P Protocal |
| Power interface | JEITA Type (DC IN 12V) |

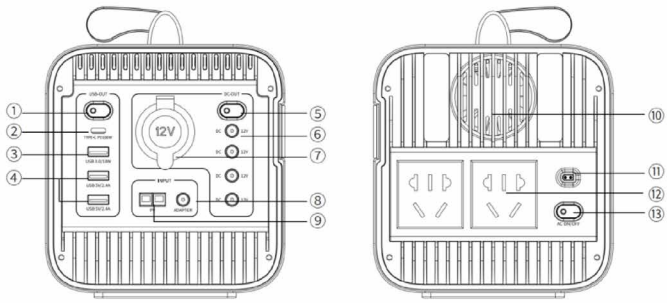
# Portable Power Bank (Optional)

| Technical Index | | Description |
|---|---|---|
| Battery Capacity | | 577.2Wh |
| AC Output | Rated Voltage | 220V 50Hz |
| | Rated Power | 600W(1000W Peak) |
| DC Output | Type-C Output | MAX:20V*5A |
| | USB Output | 5V*2.4A |
| | USB 3.0 Output | 5V/3A,9V/2A,12V/1.5A18WMAX |
| | DC Output | (12±1.5)V*10A |
| AC Adapter | | 22V/5A |
| 600 Watts output operating Time | | 50min. |
| Full charging Time | | 6 hr. |
| Operating Tempreture | | -10~40°C |
| Dimensions | | 296X150X180mm |
| Weight | | 6.8kg |




1. Remaining Time Display: Automatically calculated based on ditterent loads, showing the remaining usage time.
2. Battery Level Indicator: Divides the battery into 11 levels based on percentage, with more indicator bars indicating a fuller battery.
3. Low Battery Icon: Low battery alert, flashing when battery level drops below 10%.
4. Battery Percentage: Displays the remaining battery percentage.
5. Temperature Icon: The temperature icon will flash when the product temperature is too high.
6. Output Status Indicator: Each output status corresponds to DC, AC, USB-A, and USB-C.
7. Input Power: Displays the charging power.
8. Output Power: Displays the discharging power.
9. Output Frequency: When the 50Hz or 60Hz icon lights up, the AC output frequency is 50Hz or 60Hz.

## Control Panel of Battery



①USBA switch ②Type-C output/input port ③USB3.0 output port ④USB output port
⑤DC output switch ⑥12V/DC output port ⑦Car charger output port ⑧DC input port
⑨Anderson input port ⑩Cooling fan ⑪XT30 female connector ⑫AC output port
⑬AC switch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