Canon

4K PTZ CAMERAS
EXQUISITE 4K AT YOUR FINGERTIPS

4K UHD | **FULL HD 1920×1080**

BROADCAST-QUALITY VIDEO
FLEXIBLE CONNECTIVITY
INDOOR AND OUTDOOR APPLICATION

CANON 4K PTZ CAMERA LINEUP

INDOOR CAMERAS

CR-N300
REMOTE CAMERA 4K UHD | FULL HD 1920×1080

- High Quality 4K 30P and FHD 60P Video Output
- 1/2.3" Type CMOS Sensor
- DIGIC DV 6 Image Processor
- Hybrid AF
- PoE+ Single Cable IP operation
- Variable Pan speed of .2° - 300°/second and variable Tilt speed of .2° - 170°/second
- Optical Image Stabilization
- Virtually Seamless Integration into Canon Imaging Workflow
- Easy Integration into IP Streaming
- Various Interfaces Supported for Multiple Environments

CR-N500
REMOTE CAMERA 4K UHD | FULL HD 1920×1080

- High Quality 4K 30P and FHD 60P Video Output
- 1.0" Type CMOS Sensor
- DIGIC DV 6 Image Processor
- Canon Log 3, Wide DR Gamma Supported
- Dual Pixel CMOS AF
- Dual Pixel Focus Guide
- Face Detection & Tracking
- PoE+ Single Cable IP operation
- Variable Pan and Tilt speed of .1° - 100°/second
- Optical Image Stabilization
- Virtually Seamless Integration into Canon Imaging Workflow
- Easy Integration into IP Streaming
- Various Interfaces Supported for Multiple Environments

OUTDOOR CAMERAS

CR-X300
REMOTE CAMERA 4K UHD | FULL HD 1920×1080

- High Quality 4K 30P and FHD 60P Video Output
- 1/2.3" Type CMOS Sensor
- DIGIC DV 6 Image Processor
- IR Mode
- Optical Image Stabilization
- PoE++ Single Cable IP operation
- IP65 Water and Dust Resistant
- Built-in Wiper
- Durable Aluminum Body
- Virtually Seamless Integration into Canon Imaging Workflow
- Various Interfaces Supported for Multiple Environments

CR-X500
REMOTE CAMERA 4K UHD | FULL HD 1920×1080

- High Quality 4K 60P Video Output
- 1.0" Type CMOS Sensor
- Dual Pixel CMOS AF
- Dual DIGIC DV 6 Image Processors
- Wide ±170° Pan/ +30 ~ -50° Tilt Coverage
- Canon Log 3, Wide DR Gamma Supported
- IP65 Water and Dust Resistant
- Built-in Wiper
- Durable Aluminum Body
- Virtually Seamless Integration into Canon Imaging Workflow
- Various Interfaces Supported for Multiple Environments

RC-IP100 Remote Camera Controller

Canon's RC-IP100 Remote Camera Controller provides IP control for up to 99 supported Canon cameras. An additional Canon camera can be controlled through the serial port. The controller is equipped with a 7" interactive touch screen and a joystick in order to pan, tilt, zoom and change camera function settings remotely. The smooth precision of the joystick allows operators to capture on-air movements with confidence.

SPECIFICATIONS

Canon

	SPECIFICATION	CR-N300	CR-N500	CR-X300	CR-X500
CAMERA	OPERATING CONDITION	Indoor		Outdoor	
	IMAGE SENSOR	Type 1/2.3 (1/2.3 in.) single-plate CMOS sensor **Total pixels:** approx. 21.14 megapixels **Effective pixels:** approx. 8.29 megapixels (3840 x 2160)	Type 1.0 (1.0 in.) single-plate CMOS sensor **Total pixels:** approx. 13.40 megapixels **Effective pixels:** approx. 8.29 megapixels (3840 x 2160)	1/2.3" 4K UHD CMOS Pro Image Sensor **Total pixels:** approx. 21.14 megapixels **Effective pixels:** approx. 8.29 megapixels (3840 x 2160)	Type 1.0 (1.0 in.) single-plate CMOS sensor **Total pixels:** approx. 13.40 megapixels **Effective pixels:** approx. 8.29 megapixels (3840 x 2160)
	LENS	f=3.67 – 73.4 mm, F/1.8 – 2.8, 8-bladed circular aperture	f=8.3 – 124.5 mm, F/2.8 – 4.5, 9-bladed iris diaphragm	f=3.67 – 73.4 mm, F/1.8 – 2.8, 8-bladed circular aperture	f=8.3 – 124.5 mm, F/2.8 – 4.5, 9-bladed iris diaphragm
	ZOOM	**Optical:** 20x **Digital:** 20x	**Optical:** 15x **Digital:** 20x	**Optical:** 20x **Digital:** 20x	**Optical:** 15x **Advanced Zoom FHD:** 30x
	ANGLE OF VIEW	**4K UHD:** Horizontal: 65.6 (W) – 3.6° (T) Vertical: 39.8° (W) – 2.0° (T) **Full HD:** Horizontal: 63.5 (W) – 3.4° (T) Vertical: 38.4° (W) – 1.9° (T)	Horizontal: 73.0 (W) – 5.7° (T) Vertical: 45.2° (W) – 3.2° (T)	**4K UHD:** Horizontal: 65.6 (W) – 3.6° (T) Vertical: 39.8° (W) – 2.0° (T) **Full HD:** Horizontal: 63.5 (W) – 3.4° (T) Vertical: 38.4° (W) – 1.9° (T)	Horizontal: 73.0 (W) – 5.7° (T) Vertical: 45.2° (W) – 3.2° (T)
	SHUTTER SPEED	1/6 – 1/2000 sec. *(specific values depend on the frame frequency and frame rate)*	1/3 – 1/2000 sec. *(specific values depend on the frame frequency)*	1/6 – 1/2000 sec. *(specific values depend on the frame frequency)*	Auto, Manual 1/3 – 1/1000 sec.
	IRIS	Manual/Automatic aperture			Auto, Manual
	GAIN	0.0 dB – 36 dB	-6.0 db ~ 33.0 db	0.0 dB – 36 dB	Auto, Manual 0 db ~ 33.0 db
	ND FILTER	Built-in (1/8 at maximum, gradation ND), motor operated	Built-in (Off, 1/4, 1/16, 1/64), motor operated	**ND filter:** 1/8 at maximum **Enhanced ND filter:** 1/32	Built-in (Off, 1/4, 1/16, 1/64), motor operated
	WHITE BALANCE	AUTO (AWB), Set A, Set B, preset settings (daylight: 5,600 K*, tungsten lamp: 3,200 K*), color temperature setting (2,000 K – 15,000 K), Manual *Color temperatures are given for reference purposes only.*			AUTO (AWB), Set
	FOCUS	**Focus mode:** Manual, Continuous AF, Face AF, Tracking **AF type:** Hybrid AF, Contrast AF	**Focus mode:** Manual, AF-boosted MF, Continuous AF, Face AF, Tracking **AF type:** Dual Pixel CMOS AF, Contrast AF	**Focus Mode:** Manual, Continuous AF, Face Detection AF, Tracking **AF type:** Hybrid AF, Contrast AF	Dual Pixel CMOS AF
	GAMMA	Normal 1 (Standard), Normal 3 (BT.709)	Normal1 (Standard), Normal2 (x4.0), Normal3 (BT.709), Normal4 (x5.0), Wide DR, Canon Log 3	Normal 1 (Standard), Normal 3 (BT.709)	Normal1: BT.709, Normal1: BT.2020, Wide DR: BT.709, Wide DR: BT2020, PQ: BT2020, HLG: BT2020, Canon Log 3: BT.709, Canon Log 3: BT2020
	IMAGE STABILIZER	Optical-shift		Optical-shift (Standard IS, Powered IS)	Optical-shift
	MIN. SUBJECT ILLUMINATION	Approx. 1.5 lux (shutter speed 1/30 sec., frame frequency 59.94 Hz, (P (Programmed AE) Shooting Mode), (Auto Slow Shutter On)	3840x2160: Approx. 1.5 lux (shutter speed 1/30 sec., frame frequency 29.97P, Gain 33.0 dB) 1920x1080: Approx. 3 lux (shutter speed 1/60 sec., frame frequency 59.94P, Gain 33.0 dB)	Approx. 3.0 lux (shutter speed 1/60 sec, frame frequency 59.94Hz (P (Program AE) shooting mode), auto slow shutter "Off")	Approx. 3 lux (shutter speed 1/60 sec., Frame Rate 59.94P, Gain 33.0 dB)
	PAN, TILT, ZOOM OPERATION	**Pan Range:** Horizontal ±170° **Speed:** 0.2° – 300°/sec. **Tilt Range:** Vertical -30° – +100° **Speed:** 0.2° – 180°/sec.	**Pan Range:** Horizontal ±170° **Speed:** 0.1° – 100°/sec. **Tilt Range:** Vertical -30° – +90° **Speed:** 0.1° – 100°/sec.	**Pan Range:** Horizontal ±180° **Speed:** 0.3° – 60°/sec. **Tilt Range:** Vertical -40° – +215° **Speed:** 0.3° – 60°/sec.	**Pan Range:** Horizontal ±170° **Speed:** 0.5° – ~25°/sec. **Tilt Range:** Vertical -50° – +30° Speed: 0.3° – ~20°/sec.
VIDEO OUTPUT FORMAT	SDI	1920x1080: 59.94P/59.94i, 50.00P/50.00i/25.00P, 29.97P/23.98P (4:2:2 10 bit) 1280x720: 59.94P, 50.00 P (4:2:2 10 bit)		3840x2160: 29.97P, 25.00P, 23.98P (4:2:2 10 bit) 1920x1080: 59.94P/59.94i, 50.00P/50.00i/25.00P, 29.97P/23.98P (4:2:2 10 bit) 1280x720: 59.94P, 50.00P (4:2:2 10 bit)	3840x2160: 59.94P (4:2:2 10 bit) 1920x1080: 59.94P/59.94i, 50.00P/50.00i/25.00P, 29.97P/23.98P (4:2:2 10 bit)
		*Same video format required for SDI and HDMI (cannot select different formats for SDI and HDMI) *When 3840 x 2160 is selected for HDMI, video will not be outputted to SDI*			
	HDMI	3840x2160: 29.97P, 25.00P, 23.98P (4:2:2 10 bit) 1920x1080: 59.94P/59.94i, 50.00P/50.00i/25.00P, 29.97P/23.98P (4:2:2 10 bit) 1280x720: 59.94P, 50.00P (4:2:2 10 bit)			
		*Same video format required for SDI and HDMI (cannot select different formats for SDI and HDMI) *When 3840 x 2160 is selected for HDMI, video will not be outputted to SDI.*			
	IP	**Frame frequency 59.94 Hz** **1920 x 1080:** 59.94fps, 29.97fps, 14.99fps, 5.00fps (4:2:0 8 bit) **1280 x 720:** 59.94fps, 29.97fps, 14.99fps, 5.00fps (4:2:0 8 bit) **640 x 360:** 59.94fps, 29.97fps, 14.99fps, 5.00fps (4:2:0 8 bit)	**Frame frequency 29.97 Hz** **3840 x 2160:** 29.97fps, 14.99fps, 5.00fps (4:2:0 8 bit) **1920 x 1080:** 29.97fps, 14.99fps, 5.00fps (4:2:0 8 bit) **1280 x 720:** 29.97fps, 14.99fps, 5.00fps (4:2:0 8 bit) **640 x 360:** 29.97fps, 14.99fps, 5.00fps (4:2:0 8 bit) **Frame frequency 50.00 Hz** **1920 x 1080:** 50.00fps, 25.00fps, 12.50fps, 5.00fps (4:2:0 8 bit) **1280 x 720:** 50.00fps, 25.00fps, 12.50fps, 5.00fps (4:2:0 8 bit) **640 x 360:** 50.00fps, 25.00fps, 12.50fps, 5.00fps (4:2:0 8 bit)	**Frame frequency 25.00 Hz** **3840 x 2160:** 25.00fps, 12.50fps, 5.00fps (4:2:0 8 bit) **1920 x 1080:** 25.00fps, 12.50fps, 5.00fps (4:2:0 8 bit) **1280 x 720:** 25.00fps, 12.50fps, 5.00fps (4:2:0 8 bit) **640 x 360:** 25.00fps, 12.50fps, 5.00fps (4:2:0 8 bit) **Frame frequency 23.98 Hz** **3840 x 2160:** 23.98fps, 11.99fps, 5.99fps (4:2:0 8 bit) **1920 x 1080:** 23.98fps, 11.99fps, 5.99fps (4:2:0 8 bit) **1280 x 720:** 23.98fps, 11.99fps, 5.99fps (4:2:0 8 bit) **640 x 360:** 23.98fps, 11.99fps, 5.99fps (4:2:0 8 bit)	
		JPEG has one pattern fixed depending on the frame frequency format is fixed and cannot be selected) Resolution: 1280 x 720 when frame frequency is 59.94/29.97 Hz: 14.99 fps, when frame frequency is 50.00/25.00 Hz: 12.50 fps, when frame frequency is 23.98 Hz: 11.99 fps			
	USB	Motion JPEG: **1920x1080, 1280 x 720, 640 x 360** **59.94 Hz:** 12.00 fps, 5.00 fps	**50.00 Hz:** 12.50 fps, 5.00 fps		
	SUPPORTED PROTOCOLS	**Protocol:** XC Protocol, RTSP/RTP, NDI®|HX, RTMP/RTMPS, Standard (VISCA) Communication (Serial), Standard (VISCA) Communication (IP)			**Control:** Canon NU Protocol
INTERFACE	COMMUNICATION CONTROL	LAN, Wi-Fi, Serial, IR, USB	LAN, Wi-Fi, Serial, IR	LAN, Serial	
	NETWORK TERMINAL	LAN x 1, RJ45, 1000Base-T			
	SDI OUT TERMINAL	3G-SDI, BNC jack (output only) x 1, 0.8 Vp-p/75 Ω, unbalanced SMPTE 424, SMPTE 425, SMPTE ST 299-2 compliant Embedded audio, Time code (VITC/LTC)		6G-SDI, BNC jack (output only) x 1, 0.8 Vp-p/75 Ω, unbalanced SMPTE 2081, 424, 425, ST 299-2 compliant Embedded audio, Time code (VITC/LTC)	12G-SDI, BNC jack (output only) x 1
	GEN-LOCK TERMINAL	BNC jack x 1, 1.0 Vp-p/75 Ω, input only			BNC jack x 1
	HDMI OUT TERMINAL	HDMI connector x 1, output only			
	RS-422 TERMINAL	RJ45 connector x 1			RS-422 Serial
	MIC TERMINAL	φ3.5 mm stereo mini jack (unbalanced, plug-in power supported) • Sensitivity (MIC): -72 dBV (Manual volume center, full scale -18 dB)/1 kΩ or more/Att.: 20 dB • Sensitivity (LINE): -10 dBV (Manual volume center, full scale -18 dB)/1 kΩ or more Supply Voltage: 2.4 V DC (Bias resistance: 2.2 kΩ)		Built-In Waterproof Microphone	
	INPUT 1 / INPUT 2 XLR TERMINALS		INPUT (3-pin jack) (pin1: shield, pin2: hot, pin3: cold), 2 sets, balanced **Sensitivity (MIC):** -60 dBu (Manual volume center, full scale -18 dB)/600 Ω/Att.: 20 dB **Sensitivity (LINE):** +4 dBu (Manual volume center, full scale -18 dB)/1 kΩ or more **Supply Voltage:** 48 V DC (Bias resistance: 6.8 kΩ)		
OTHER	OPERATING ENVIRONMENT	**Temperature:** +32°F – +104°F (0°C – +40°C) **Humidity:** 10% – 90% (without condensation)		**Temperature:** +5°F – +104°F (-15°C – +40°C) **Humidity:** 90% or less (without condensation) *Startup temperature: +14°F – +104°F (-10°C – +40°C)*	
	DUST/WATER RESISTANCE			IP65	IP55
	POWER SUPPLY	**PoE:** PoE+ power supply via LAN connector (IEEE802.3at compliant) – PoE cannot be used **External power source:** 24V DC (using included AC adaptor)		**PoE:** PoE++ power supply via LAN connector (IEEE802.3bt compliant) – PoE and PoE+ cannot be used **External power source:** 12V DC *(use included power cable with DC plug)*	
	POWER CONSUMPTION	**PoE+ Input:** Approx. 16.2W* max. (body only) **DC Input:** Approx. 15.0W max. (body only) *Class 4 (25.5 W required) for power supply devices*	**PoE+ Input:** Approx. 19.6W* max. (body only) **DC Input:** Approx. 18.6W max. (body only) *Class 4 (25.5 W required) for power supply devices*	**PoE++ Input:** Approx. 39.8W* max. (body only) **DC Input:** Approx. 37.7W max. (body only) *Class 5 (40.0 W required) for power supply devices*	DC 10.5 - 15 V, 90W
	QUIETNESS	NC35 or lower	NC30 or lower	NC45 or lower (when operating at 60°/sec)	NC55 or less
	DIMENSIONS (W X H X D)	Approx. 6.06 x 7.01 x 6.46 in. (154 x 178 x 164 mm) *(excluding protrusions)*	Approx. 7.87 x 10.59 x 8.19 in. (200 x 269 x 208 mm) *(excluding protrusions)*	Approx. 8.54 x 12.24 x 8.54 in. (217 x 311 x 217 mm) *(excluding protrusions and connector cover)*	Approx. 13.27 x 15.35 x 15.2 in. (337 x 390 x 386 mm) *(excluding protrusions)*
	WEIGHT	Approx. 4.86 lb. (2.2 kg) (body only)	Approx. 9.04 lb. (4.1 kg) (body only)	Approx. 15.5 lb. (7 kg) (body only)	Approx. 37.48 lbs. (17.0 kg)
	SUPPORTED CONTROLLERS	**Hardware:** RC-IP100 **Software:** Remote Camera Control Application Search Tool			**Hardware:** RC-IP100

For more info: pro.usa.canon.com

🐦 @CanonUSApro   ▶️ @CanonUSA
📷 @CanonUSAprovideo   f @CanonUSA

11/2021