CLOSE THE DISTANCE WITH UNRIVALLED CLARITY

POWER STATUS

Canon

CANON PTZ SYSTEM AT A GLANCE

CR-N700

An exceptional 4K60P professional PTZ camera with 12G-SDI connectivity and class-leading auto focus with built-in intelligent Auto Tracking.

Ideal for:

- Broadcast
- Musical Performances
- TV Studios
- Live Events

CR-N500

With a 15x optical zoom and 4K UHD shooting capabilities, the CR-N500 offers precise control and seamless IP streaming, with built in intelligent auto tracking.

Ideal for:

- Broadcast
- Live Events
- Higher Education
- TV Studios
- Musical Performances

CR-N300

A high quality 4K PTZ camera with advanced autofocus, 20x optical zoom and multiple IP protocols with built-in intelligent Auto Tracking.

Ideal for:

- Higher Education
- Content Creators
- Live Events
- Corporate
- Houses of Worship

CR-N100

A high quality 4K PTZ camera with advanced autofocus, 20x optical zoom and multiple IP protocols with built-in intelligent Auto Tracking.

Ideal for:

- Higher Education
- Corporate
- Live Events
- Houses of Worship

CR-X500

Capture incredible 4K UHD footage in a variety of conditions thanks to this weatherproof IP55 rated outdoor PTZ camera, boasting a 15x optical zoom and 12G-SDI connectivity.

Ideal for:

- Broadcast
- Surveillance and Monitoring
- Live Events

CR-X300

The CR-X300 is part of Canon's 4K PTZ camera range suitable for outdoor use. Thanks to IP connectivity and streaming plus a compact, IP65 rated weatherproof housing.

Ideal for:

- Broadcast
- Surveillance and Monitoring
- Live Events

PTZ ACCESSORIES

RC-IP1000 PTZ Controller

A professional PTZ controller with seven-inch colour touchscreen, offering standalone IP video and input monitoring for up to 200 feeds.

RC-IP100 Controller

Pan, tilt and zoom effortlessly with this high-quality controller featuring a multi-function joystick and intuitive touchscreen for easy control of up to 100 cameras over IP.

Remote Camera Control Application

Complete your PTZ infrastructure with this free Canon software that enables control of up to 20 Canon PTZ cameras, nine of which can be shown as a live preview at any one time on the user interface.

Multi Camera Management Application

A PC application that allows multiple cameras and controllers to be set up, monitored, and managed from a single software application.

Auto Tracking Application (RA-AT001)*

Unlock the potential to track the main speaker with face/head detection as they move around the stage, automatically. Harness the power of excellent 4K PTZ imagery with effortless automation to add a new dimension to your productions.

*Free Auto Tracking App RA-AT001 (Lite) available via new FW, 1.5.0 or later. Paid license is required for full functionality of auto tracking

Auto Loop Application (RA-AL001)*

Programme repeated camera pan, tilt, and zoom movements to track repeated live action, consistently and accurately. Capture footage of live events and musical performances with style.

*Paid license required.

Multi-Camera Management Application

Take control of up to 200 cameras direct from your PC and perform key tasks such as multi-view monitoring, device backup, assignment and registration as well as perform firmware updates to linked cameras simultaneously.

Webcam Driver

With the free of charge* Webcam Driver, you can enjoy seamless video streaming in up to 4K 30p with maximum 5 selected Canon PTZ Cameras via a simple ethernet connection. Compatible with most conferencing platforms and applications which require UVC, this Windows OS software is a virtual USB driver which allows an easy video streaming integration, ideal for video conferencing and online lectures.

*A third party license may be required.

Broadcast & TV Studios

Ideal for Studios and Broadcasters to minimize camera operators but maintain high image quality.

Corporate

Create professional company content, capture incredible corporate speeches or keep connected through the power of video conferencing thanks to Canon PTZ Cameras.

Live Events & Music

Capture powerful events and musical performances through the quality of Canon's Professional PTZ range.

Higher Education

Ensure your students do not miss out on crucial lectures, lessons or tutorials with Canon PTZ cameras.

Houses of Worship

Worship from home, Canon PTZ cameras enable worship-goers to follow the service remotely thanks to Live Streaming.

Outside Broadcast & Sports

Canon's range of weatherproof PTZ cameras mean outside broadcast and sports can still be captured remotely in the highest quality even in the harshest of conditions.

Surveillance & Monitoring

Canon outdoor PTZ range make surveillance and monitoring easy thanks to their rugged body and easy connectivity options.

CANON PTZ TECHNOLOGY

4K Image Quality

Utilising the Digic DV6 processor and 4K CMOS sensor, all Canon PTZ cameras are capable of producing 4K UHD 30P imagery with some models achieving 4K UHD 60P.

Canon 4K Optics

All of the PTZ range feature Canon's innovative 4K Optical layout with Zoom ranges ranging from 15x to 20x. Canon's PTZ range also come with the added benefit of image stabilized zoom ensuring the perfect shot can be captured.

Dual Pixel CMOS AF*

Canon's renowned Dual Pixel CMOS Auto Focus system provides extremely quick and accurate focus via multiple modes.
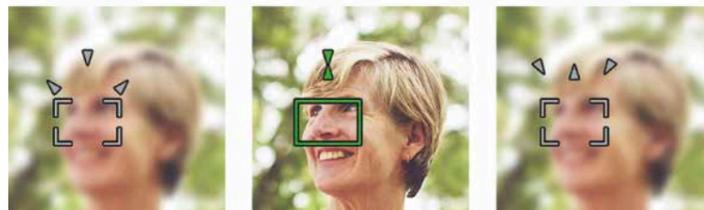
Dual Pixel Focus Guide
Provides a visual representation whether the subject is in focus when focus is manually operated.

Face Priority / Face Only AF
Detects faces automatically and tracks the focus of the selected subject.

Touch AF
Working with the Remote Camera Control Application software, users can select an object they would specifically like to focus on.

Hybrid AF

Combines high-precision contrast AF with high-speed phase-detection AF, ensuring rapid and accurate focusing of the subject, even in low light conditions.**

* Available on CR-N700, CR-N500 and CR-X500 only.
** Available on CR-N100, CR-N300 and CR-X300 only.
*** Available on the CR-X500 and CR-X300 only. IP65 rating is only on CR-X300, CR-X500 is also weather Resistant but rating is IP55.
**** Available on the CR-X500 and CR-N500 only.
***** Available on the CR-N700, CR-N500, CR-N300 and CR-N100 only.

Weather Resistant

Canon Outdoor PTZ cameras are up to IP55/65 Dust & Water resistance and feature inbuilt wipers which make them durable and functional even in wet and windy conditions.***

HDR Imagery

Achieve stunning HDR imagery with Canon Log 3 and Wide Dynamic Range Support. Both technologies ensure the best HDR imagery can be achieved for applications where postproduction or a quick turnaround is required. ****
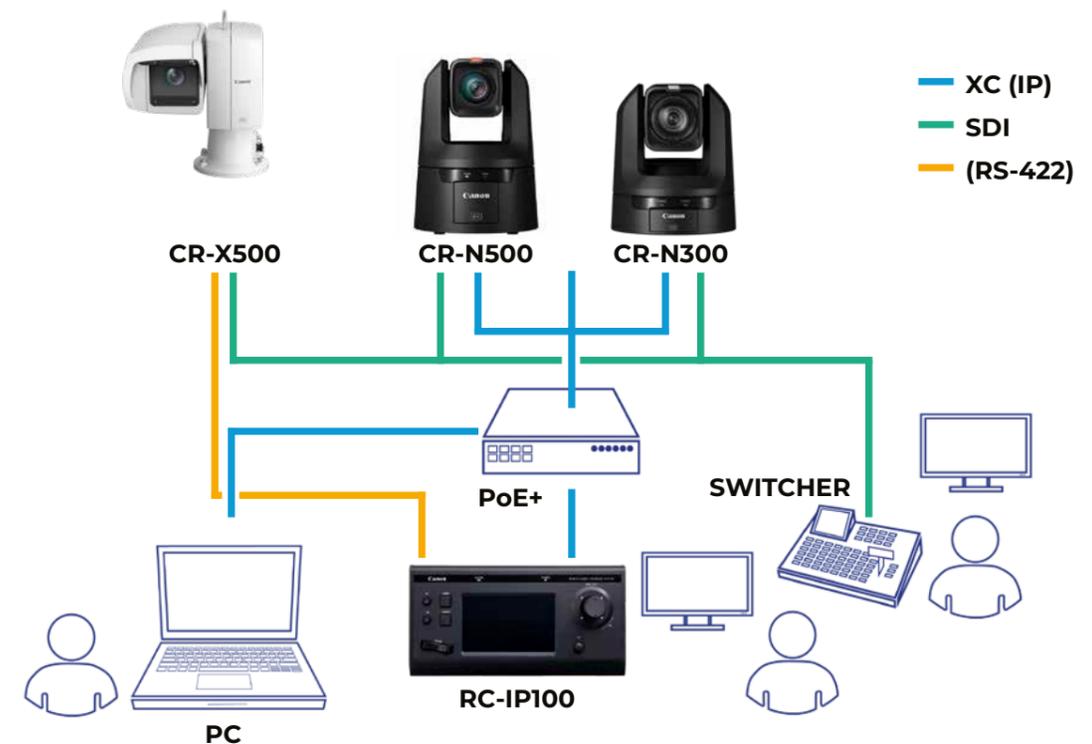
Auto Tracking App

Unlock the potential to track the main speaker with face/ head detection as they move around the stage, automatically.*****

IP Streaming & Control

A comprehensive range of IP control and streaming protocols up to 4K UHD 30p (such as NDI|HX*, RTMP, RTP/RTSP, RTMPS and Canon's XC Protocol) are included, making the Canon Remote PTZ Camera an ideal solution for new or existing systems.

— XC (IP)
— SDI
— (RS-422)

CR-X500   **CR-N500**   **CR-N300**

PoE+   **SWITCHER**

RC-IP100

PC

CR-N700

An exceptional 4K60P professional PTZ camera with 12G-SDI connectivity and class-leading auto focus with built-in intelligent Auto Tracking.

Harness the power of a 1.0-type 4K sensor and DIGIC DV7 processor with Dual Pixel AF. A 15x optical zoom (30x in Full HD) captures productions in exceptional detail, even in Night Mode. Stream 4K60P and HDR quality broadcast footage via a wide range of IP protocols and automate your productions using Auto Tracking and Auto Loop functions*

CR-N700: HIGHLIGHTS

4K detail for imaging excellence
A 1.0-Type CMOS sensor and DIGIC DV7 processor deliver 4K UHD 60P imagery in up to 4:2:2 10-bit, 12G-SDI and HDMI for broadcast-standard image quality, plus 4K60P over IP.

Accurate 4K Auto Tracking*
Unlock the potential to track the main speaker with face/head detection as they move around the stage, automatically. Capable of multiple adjustments, settings such as composition size, tracking sensitivity, exclusion zones, priority display area and more mean the ideal tracking set-up can be easily achieved.

Intelligent Auto Loop*
Experience the flexibility of programming movements with the ability to initialise a loop back and forth, meaning no camera operator is required. Five automatic movement routes can be registered and are easy to create or customise thanks to an easy setting UI.

Powerful HDR imagery and low light capture
Achieve stunning HDR imagery with direct recording into either PQ or HLG formats. A range of custom picture settings includes Canon Log 3 and Wide Dynamic Range to match your image with other Canon cameras.

Night Mode
Capture footage in near-darkness thanks to IR Mode, which extends the spectrum visible to the camera.

Class-leading optical precision
The CR-N700's high-performance lens has a 15x optical zoom (25.5mm - 382.5mm, 35mm equivalent) plus a 30x Advanced Zoom when shooting in Full HD. And when conditions are unstable, Canon's renowned Image Stabilizer captures optimal footage.

Award-winning Auto Focus technology
Fast, intelligent, and extremely accurate focussing via multiple modes thanks to Canon's proprietary Dual Pixel CMOS AF technology with advanced EOS iTR AF X.

Multiple protocols for seamless integration
The CR-N700 features SRT and NDI|HX** that produce high quality video streams for broadcasters. RTMP/RTMPS, RTP/RTSP are included, along with Canon XC and Standard communication protocols, plus FreeD for integration into virtual productions.

Crop function – single camera, two video feeds
Select and extract a point of interest via a separate feed. The chosen area can then be output as a main or secondary signal and up to two cropped areas can be set in FHD.

*Free Auto Tracking App RA-AT001(Lite) available via new FW, 1.4.0 or later. Paid license is necessary for full functionality of auto tracking
** NDI is a trademark or registered trademark of NewTek, Inc. in the United States and other countries

CR-N700: SPECIFICATIONS

4K 60P Image Quality
Captures exceptional broadcast level imagery in up to 4K UHD 60P, 4:2:2 10-bit thanks to 1.0-Type Sensor and DIGIC DV7 Processor

Dual Pixel CMOS AF with EOS iTR AF X
Smooth, fast, and accurate autofocus with 'deep learning', head detection, eye detection and tracking

15x Optical and 30x Advanced zoom
Image stabilised 15x Optical zoom in 4K or up to 30x Advanced zoom in Full HD

Auto Tracking functionality
Follows a subject automatically as they move around

Inbuilt Protocols
Including NDI|HX**, SRT, FreeD, RTMP/RTMPS, RTP/RTSP, Canon XC and Standard Communication protocol

Specifications in Detail

IMAGE SENSOR	Type 1.0 (1.0 in.) single-plate CMOS sensor
EFFECTIVE PIXELS	approx. 8.29 megapixels (3840 x 2160)
LENS	f=8.3 –124.5 mm, F/2.8 –4.5, 15x optical zoom, 9-bladed iris diaphragm
OPTICAL ZOOM	15x optical zoom (30 x with advanced zoom)
DIGITAL ZOOM	20x digital zoom
FOCAL LENGTH	8.3 –124.5 mm, f/2.8 –4.5, 35mm equivalent focal length: approx. 25.5 (W) –382.5 mm (T)
ANGLE OF VIEW	Horizontal: 73.0 (W) –5.7°(T) Vertical: 45.2°(W) –3.2°(T)
MINIMUM SUBJECT ILLUMINATION	Approx. 3.0 lux (with 59.94 Hz frame frequency, 1/60 sec. shutter speed, 59.94P frame rate, and 21 dB gain) Approx. 2.5 lux (with 50.00 Hz frame frequency, 1/50 sec. shutter speed, 50.00P frame rate, and 21 dB gain)
SHUTTER SPEED	1/3 –1/2000 sec. (specific values depend on the frame frequency and frame rate)
IRIS	Manual/Automatic aperture
GAIN	'-6.0 dB -36.0 dB
ND FILTER	Built-in (Off, 1/4, 1/16, 1/64), motor operated
NIGHT MODE (IR CUT FILTER OFF)	Yes
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
FOCUS	Focus mode: Manual, AF-boosted MF, Continuous AF, Face AF, Tracking AF type: Dual Pixel CMOS AF, Contrast AF Detection: Face Detection, Eye Detection
MINIMUM FOCUSING DISTANCE	1 cm at wide end, 60 cm across entire zooming range
GAMMA	BT.709 Normal, BT.709 Wide DR, BT.709 Standard, Canon Log 3, PQ, HLG
PAN AND TILT	Pan operation range: Horizontal ±170° Pan operation speed: 0.1°–100°/sec. Tilt operation range: Vertical -30°–+90° Tilt operation speed: 0.1°–100°/sec.

Physical Features

OPERATING ENVIRONMENT	Temperature 0°C –+40°C (+32°F –+104°F) Humidity 0% –90% (without condensation)
POWER SUPPLY	PoE: PoE++ power supply via LAN connector (IEEE802.3bt compliant) –PoE and PoE+ cannot be used External power source: 12 V DC
POWER CONSUMPTION	PoE++ Input: Approx. 37.4 W*/1.2 A max. (body only) DC Input: Approx. 36.7 W/3.5 A max. (body only) * Class 5 (40.0 W required) for power supply devices
DIMENSIONS (WXHXD)	Approx. 200 x 269 x 208 mm (excluding protrusions)
WEIGHT	Approx. 4.4 kg (9.7 lb.) (body only)
IP RATING	-

Server

VIDEO OUPUT FORMAT: SDI		[12G-SDI] 3840 x 2160: 59.94P/29.97P/23.98P/50.00P/25.00P (4:2:2 10 bit) 1920 x 1080: 59.94P/59.94i/29.97P/29.97PsF/23.98P/50.00P/50.00i/ 25.00P/25.00PsF (4:2:2 10 bit) 1280 x 720: 59.94P/50.00P (4:2:2 10 bit) 720 x 576: 59.94/50.00i (4:2:2 10 bit)
	[3G-SDI]	1920 x 1080: 59.94P/59.94i/29.97P/23.98P/50.00P/50.00i/25.00P (4:2:2 10 bit) 1280 x 720: 59.94P/50.00P (4:2:2 10 bit) 720 x 576: 59.94i/50.00i (4:2:2 10 bit)
HDMI		3840 x 2160: 59.94P/29.97P/23.98P/50.00P/25.00P (4:2:2 10 bit) 1920 x 1080: 59.94P/59.94i/29.97P/23.98P/50.00P/50.00i/25.00P (4:2:2 10 bit) 1280 x 720: 59.94P/50.00P (4:2:2 10 bit) 720 x 576: 59.94i/50.00i (4:2:2 10 bit)
IP		Frame frequency 59.94 Hz] 3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) [Frame frequency 29.97 Hz] 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) [Frame frequency 50.00 Hz] 3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360: 50.00 fps, 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) [Frame frequency 25.00 Hz] 3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360: 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) [Frame frequency 23.98 Hz] 3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360: 23.98 fps, 11.99 fps, 5.99 fps (4:2:0 8 bit) *59.94 fps/50.00 fps is only when H.265. –JPEG has one pattern fixed depending on the frame frequency (format is fixed and cannot be selected) Resolution: 1280 x 720 59.94/29.97 Hz: 14.99 fps, 50.00/25.00 Hz: 12.50

Interface

COMMUNICATION CONTROL	LAN, Wi-Fi, Serial, IR
NETWORK TERMINAL	LAN x 1, RJ45, 1000Base-T
12G-SDI OUT TERMINAL	BNC jack (output only) x 1, 0.8 Vp-p/75 Ω, SMPTE ST 2082, 2081, 424, 425, 292, 259, 299, 272 compliant Embedded audio, Time code (VITC/LTC)
6G-SDI OUT TERMINAL	No
3G-SDI OUT TERMINAL	BNC jack (output only) x 1, 0.8 Vp-p/75 Ω, SMPTE ST 424, 425, 292, 259, 299, 272 compliant Embedded audio, Time code (VITC/LTC)
GEN-LOCK TERMINAL	BNC jack (also serves as the SYNC OUT terminal)
TIME CODE TERMINAL	BNC jack (for both input/output)
HDMI OUT TERMINAL	HDM connector (Type A), both video and audio are output only
RS-422 TERMINAL	RJ45 connector x 1
AUDIO INPUT 1/INPUT 2 TERMINALS	XLR 3-pin jack (balanced) ((1) shield, (2) hot, (3) cold), two lines Sensitivity (MIC): -60 dBu (manual volume center, -18 dB full scale) Sensitivity (LINE): +4 dBu (manual volume center, -18 dB full scale) Supply Voltage: 48 V DC (Bias resistance: 6.8 kΩ)
MIC TERMINAL	3.5 mm stereo mini-jack (unbalanced; supports plug-in power) Sensitivity (MIC): -72 dBu (manual volume center, -18 dB full scale) Sensitivity (LINE): -10 dBV (manual volume center, -18 dB full scale) Supply Voltage: 2.4 V DC (Bias resistance: 2.2 kΩ)
USB TERMINAL	No
EXTERNAL DEVICE I/O TERMINAL	-

CR-N500

With a 15x optical zoom and 4K UHD shooting capabilities, the CR-N500 offers precise control and seamless IP streaming, even in low light conditions.

A dynamic PTZ camera aimed at productions and video streaming, the CR-N500 boasts a 1.0-type 4K UHD sensor and Dual Pixel CMOS AF, plus 15x optical zoom, smooth pan and tilt as well as image stabilisation to capture content in superb detail and the ability to automate your productions using Auto Tracking** and Auto Loop functions.

CR-N500: HIGHLIGHTS

Powerful 4K Imagery
The 1.0-type CMOS Sensor and DIGIC DV6 processor work in unison to deliver exceptional 4K UHD/30p image quality as well as upscaled Full HD/60p images thanks to over sampled HD processing.

IP Streaming and Control for your Production
A comprehensive range of IP control and streaming protocols up to 4K UHD 30p (such as NDI|HX*, RTMP, RTP/RTSP, RTMPS, SRT, FreeD, Standard Communication Protocol (IP/Serial), and Canon's XC Protocol) are included, making the CR-N500 an ideal solution for new or existing systems.

Extensive Connector for Ease of Use
The CR-N500 features a host of connections to ensure the ultimate flexibility, including a 3G-SDI video output, full-sized HDMI port (supporting 4K UHD 30p at 4:2:2 10-bit), professional XLR audio inputs, as well as a PoE+ LAN port to allow for easy system integration.

HDR Imagery with Image Quality Adjustments
Achieve stunning HDR imagery with Canon Log 3 and Wide Dynamic Range Support. Both technologies ensure the best HDR imagery can be achieved for applications where postproduction or a quick turnaround is required. The in-built image adjustment settings also ensure flexible and bespoke imagery to colour match with other cameras.

Seamless High Quality 4K Video Streaming
Achieve stunning HDR imagery with Canon Log 3 and Wide Dynamic Range Support. Both technologies ensure the best HDR imagery can be achieved for applications where postproduction or a quick turnaround is required. The in-built image adjustment settings also ensure flexible and bespoke imagery to colour match with other cameras.

Stabilised 15x Optical Zoom to Get Closer
Canon's advanced 4K optics make sure greater detail is captured, and flexibility assured, with a 15x optical zoom (25.5-382.5mm 35mm equivalent), providing a wide angle to telephoto field of view. Canon's advanced four-axis image stabilisation ensures high quality image capture.

Excellent Imagery in Low Light
The CR-N500 produces high quality imagery with low noise, even with a minimum illumination of 1.5 lux. The large 1.0-type CMOS sensor and the DIGIC DV6 processor ensure the image quality retains its integrity even in the most challenging of lighting conditions.

Dual Pixel CMOS AF Keeps it Sharp
The CR-N500 features Canon's renowned Dual Pixel CMOS Auto Focus system which provides extremely quick and accurate focus via multiple modes.

Smooth and Precise Control
The CR-N500 is equipped with a high-precision drive mechanism enabling fine adjustments of the Pan and Tilt movement and speed ensuring the perfect shot. Compatible with the RC-IP100 controller and Remote Camera Control Application controllers, the CR-N500 is also compatible with selected third-party controllers.

Accurate 4K Auto Tracking
Unlock the potential to track the main speaker with face detection as they move around the stage, automatically. Capable of multiple adjustments, settings such as composition size, tracking sensitivity, exclusion zones, priority display area and more mean the ideal tracking set-up can be easily achieved.

* NDI is a trademark or registered trademark of NewTek, Inc. in the United States and other countries
** Free Auto Tracking App RA-AT001 (Lite) available via new FW,1.5.0 or later. Paid license is required for full functionality of auto tracking

---

CR-N500: SPECIFICATIONS

4K UHD
1.0-type CMOS sensor for stunning quality

Dual Pixel AF
For smooth, fast and accurate focusing

HDR Support
Excellent HDR imagery with Canon Log 3 and Wide Dynamic Range Support

Auto Tracking functionality
Follows a subject automatically as they move around

15x Image Stabilised Optical Zoom
From wide-angle to telephoto, with a focal length range of 25.5-382.5mm

Extensive Connectivity
Featuring 3G-SDI, HDMI, PoE+ and XLR Inputs for easy integration

Supports IP Streaming and Control Protocols
NDI|HX*, RTMP/RTMPS, RTP/RTSP, SRT, FreeD, Standard Communication Protocol(IP/Serial) and Canon XC Protocol

Specifications in Detail

IMAGE SENSOR	Type 1.0 (1.0 in.) single-plate CMOS sensor
EFFECTIVE PIXELS	approx. 8.29 megapixels (3840 x 2160)
LENS	f=8.3 – 124.5 mm, F/2.8 – 4.5, 15x optical zoom, 9-bladed iris diaphragm
OPTICAL ZOOM	15x optical zoom
DIGITAL ZOOM	20x digital zoom
FOCAL LENGTH	f=8.3 – 124.5 mm, F/2.8 – 4.5, 35mm equivalent focal length: approx. 25.5 (W) – 382.5 mm (T)
ANGLE OF VIEW	Horizontal: 73.0 (W) – 5.7° (T) Vertical: 45.2° (W) – 3.2° (T)
MINIMUM SUBJECT ILLUMINATION	3840 x 2160: Approx. 1.5 lux (shutter speed 1/30 sec., Frame Rate 29.97P, Gain 33.0 dB) 1920 x 1080: Approx. 3 lux (shutter speed 1/60 sec., Frame Rate 59.94P, Gain 33.0 dB)
SHUTTER SPEED	1/3 – 1/2000 sec. (specific values depend on the frame frequency and frame rate)
IRIS	Manual/Automatic aperture
GAIN	-6.0 db - 33.0 db
ND FILTER	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.
FOCUS	Focus mode: Manual, AF-boosted MF, Continuous AF, Face AF, Tracking AF type: Dual Pixel CMOS AF, Contrast AF
GAMMA	Normal1 (Standard), Normal2 (x4.0), Normal3 (BT.709), Normal4 (x5.0), Wide DR, Canon Log 3
PAN AND TILT	Pan operation range: Horizontal ±170° Pan operation speed: 0.1° – 100°/sec. Tilt operation range: Vertical -30° – +90° Tilt operation speed: 0.1° – 100°/sec.
PROTOCOL	Protocol: XC (Canon's original), RTSP/RTP, NDI|HX, RTMP/RTMPS, SRT, FreeD, Standard Communication (Serial), Standard Communication (IP)

Physical Features

OPERATING ENVIRONMENT	Temperature 0°C – +40°C (+32°F – +104°F) Humidity 10% – 90% (without condensation)
POWER SUPPLY	PoE: PoE+ power supply via LAN connector (IEEE802.3at compliant) – PoE cannot be used External power source: 24 V DC (using included AC adaptor)
POWER CONSUMPTION	PoE+ Input: Approx. 19.6 W* max. (body only) DC Input: Approx. 18.6 W max. (body only) * Class 4 (25.5 W required) for power supply devices
DIMENSIONS (WXHXD)	Approx. 200 x 269 x 208 mm (7.87 x 10.59 x 8.19 in.) (excluding protrusions)
WEIGHT	Approx. 4.1 kg (9.04 lb.) (body only)
IP RATING	-

Server

VIDEO OUTPUT FORMAT: SDI	1920 x 1080: 59.94P/59.94i, 50.00P/50.00i/25.00P, 29.97P/23.98P (4:2:2 10 bit) 1280 x 720: 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.
VIDEO OUTPUT FORMAT: HDMI	3840 x 2160: 29.97P, 25.00P, 23.98P (4:2:2 10 bit) 1920 x 1080: 59.94P/59.94i, 50.00P/50.00i/25.00P, 29.97P/23.98P (4:2:2 10 bit) 1280 x 720: 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.
VIDEO OUTPUT FORMAT: IP	3840 x 2160: 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 1920 x 1080: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 1280 x 720: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 640 x 360: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) – If 59.94/50.00 Hz is selected for the frame frequency, the 3840 x 2160 format cannot be selected. – A frame rate that exceeds the frame frequency cannot be selected. – 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 59.94/50.00 Hz: 14.99 fps, when frame frequency is 23.98 Hz: 11.99 fps, when frame frequency is 29.97/25.00 Hz: 12.50 fps
VIDEO OUTPUT FORMAT: USB	-
PRESET	Number of presets: Max. 100 (including home position)

Interface

COMMUNICATION CONTROL	LAN, Wi-Fi, Serial, IR
NETWORK TERMINAL	LAN x 1, RJ45, 1000Base-T
3G-SDI OUT TERMINAL	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)
GEN-LOCK TERMINAL	BNC jack x 1, 1.0 Vp-p/75 Ω, input only
HDMI OUT TERMINAL	HDMI connector x 1, output only
RS-422 TERMINAL	RJ45 connector x 1
INPUT 1/INPUT 2 TERMINALS	XLR/Audio Input (3-pin jack) (pin1: shield, pin2: hot, pin3: cold), 2 sets, balanced Sensitivity (MIC): -60 dBu (Manual volume center, full scale -18 dBJ/600 Ω/Att.: 20 dB Sensitivity (LINE): +4 dBu (Manual volume center, full scale -18 dBJ/1 kΩ or more Supply Voltage: 48 V DC (Bias resistance: 6.8 kΩ)
MIC TERMINAL	3.5 mm stereo mini jack (unbalanced, plug-in power supported) Sensitivity (MIC): -72 dBV (Manual volume center, full scale -18 dBJ/1 kΩ or more/Att.: 20 dB Sensitivity (LINE): -10 dBV (Manual volume center, full scale -18 dBJ/1 kΩ or more Supply Voltage: 2.4 V DC (Bias resistance: 2.2 kΩ)
USB TERMINAL	Type-A (USB 2.0) x 1 (future expansion)

CR-N300

A high quality 4K PTZ camera with advanced autofocus, 20x optical zoom and multiple IP protocols with built-in intelligent Auto Tracking.

The CR-N300 makes content creation and streaming simple. Equipped with a 1/2.3-inch CMOS sensor with 4K UHD resolution, 20x image stabilised optical zoom and a wide range of streaming and control protocols, as well as the ability to automate your productions using Auto Tracking App RA-AT001 (Lite)**, it's the ideal choice for a variety of productions.

CR-N300: HIGHLIGHTS

Razor Sharp 4K Imagery
A 1/2.3-type CMOS Sensor and DIGIC DV6 processor combine to deliver exceptional 4K UHD imagery (up to 30p), or outstanding Full HD footage thanks to over sampled HD processing. These technologies provide an image quality with superior levels of detail fit for any production.

Hybrid AF for Precise Control
The CR-N300 combines high-precision contrast AF with high-speed phase-detection AF, ensuring rapid and accurate focusing of the subject, even in low light conditions.

Flexible Connectivity for your Workflow
The CR-N300 features a whole host of connections to ensure the ultimate flexibility in workflows. Featuring a HDMI port which can achieve 4K UHD, 4:2:2 10-bit. The camera also boasts a 3G-SDI port, USB Port, 3.5mm Audio Input and a PoE+ LAN port.

Image Presets for Quick and Easy Use
The CR-N300 is equipped with multiple Image Presets that allow for quick and easy adjustments of video settings for specific environments. The user can also register up to 100 preset positions on the CR-N300 making productions simple and easy.

20x Optical Zoom for Incredible Flexibility
Capture all the detail you need, thanks to Canon's advanced 4K optics which feature a flexible 20x optical zoom covering a broad focal range of 29.3-601mm (35mm equivalent), ensuring great flexibility. Equipped with image stabilisation, for minimal image disruption when moving.

IP Streaming and Control for your Productions
A comprehensive range of IP control and streaming protocols up to 4K UHD 30p (such as NDI|HX*, RTMP, RTP/RTSP, RTMPS, SRT, FreeD, Standard Communication Protocol(IP/Serial), and Canon's XC Protocol) are included, making the CR-N500 an ideal solution for new or existing systems.

Smooth, Precise Control
The CR-N300 is equipped with a high-precision drive mechanism, enabling the Pan and Tilt movement to be finely adjusted at variable speeds using controllers such as RC-IP100, Canon Remote Camera Control Application or a tablet via Wi-Fi, to capture the perfect shot.

Accurate 4K Auto Tracking**
Unlock the potential to track the main speaker with face/head detection as they move around the stage, automatically. Capable of multiple adjustments, settings such as composition size, tracking sensitivity, exclusion zones, priority display area and more mean the ideal tracking set-up can be easily achieved.

Seamless High Quality 4K Video Streaming
Achieve stunning HDR imagery with Canon Log 3 and Wide Dynamic Range Support. Both technologies ensure the best HDR imagery can be achieved for applications where postproduction or a quick turnaround is required. The in-built image adjustment settings also ensure flexible and bespoke imagery to colour match with other cameras.

CR-N300: SPECIFICATIONS

4K UHD
1/2.3-type CMOS sensor and DIGIC DV6 processor produces stunning quality

Hybrid AF
For fast and accurate focusing even in low light

Lightweight and Compact Chassis
154 x 178 x 164 mm (W x H x D) and weighing just 2.2kg

Auto Tracking functionality
Follows a subject automatically as they move around

20x Image Stabilized Optical Zoom
From wide-angle to telephoto, with a broad focal range of 29.3-601mm

Extensive Connectivity
Featuring 3G-SDI, HDMI, PoE+, USB and 3.5mm jack for easy integration

Supports IP Streaming and Control Protocols
NDI|HX*, RTMP/RTMPS, RTP/RTSP, SRT, FreeD, Standard Communication Protocol(IP/Serial), and Canon XC Protocol

Specifications in Detail

IMAGE SENSOR	Type 1/2.3 (1/2.3 in.) single-plate CMOS sensor
EFFECTIVE PIXELS	approx. 8.29 megapixels (3840 x 2160)
LENS	f=3.67 – 73.4 mm, F/1.8 – 2.8, 20x optical zoom, 8-bladed circular aperture
OPTICAL ZOOM	20x optical zoom
DIGITAL ZOOM	20x digital zoom
FOCAL LENGTH	f=3.67 – 73.4 mm, F/1.8 – 2.8, 35mm equivalent focal length: [4K UHD] approx. 29.3 (W) – 601 mm (T) [Full HD] approx. 30.5 (W) – 627 mm (T)
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)
MINIMUM SUBJECT ILLUMINATION	Approx. 1.5 lux (shutter speed 1/30 sec., frame rate 59.947P (Programmed AE) shooting mode, auto slow shutter on
SHUTTER SPEED	1/6 – 1/2000 sec. (specific values depend on the frame frequency and frame rate)
IRIS	Manual/Automatic aperture
GAIN	0.0 dB – 36 dB
ND FILTER	Built-in (1/8 at maximum, gradation ND), motor operate
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.
FOCUS	Focus mode: Manual, Continuous AF, Face AF, Tracking AF type: Hybrid AF, Contrast AF
GAMMA	Normal1 (Standard), Normal3 (BT.709)
PAN AND TILT	Pan operation range: Horizontal ±170° Pan operation speed: 0.2° – 300°/sec. Tilt operation range: Vertical -30° – +100° Tilt operation speed: 0.2° – 170°/sec.
PROTOCOL	Protocol: XC (Canon's original), RTSP/RTP, NDI|HX, RTMP/RTMPS, SRT, FreeD Standard Communication (Serial), Standard Communication (IP)

Physical Features

OPERATING ENVIRONMENT	Temperature 0°C – +40°C (+32°F – +104°F) Humidity 10% – 90% (without condensation)
POWER SUPPLY	PoE: PoE+ power supply via LAN connector (IEEE802.3at compliant) – PoE cannot be used External power source: 24 V DC (using included AC adaptor)
POWER CONSUMPTION	PoE+ Input: Approx. 16.2 W* max. (body only) DC Input: Approx. 15.0 W max. (body only) * Class 4 (25.5 W required) for power supply devices
DIMENSIONS (WXHXD)	Approx. 154 x 178 x 164 mm (6.06 x 7.01 x 6.46 in.) (excluding protrusions)
WEIGHT	Approx. 2.2 kg (4.86 lb.) (body only)
IP RATING	-

Server

VIDEO OUTPUT FORMAT: SDI	1920 x 1080: 59.94P/59.94i, 50.00P/50.00i/25.00P, 29.97P/23.98P (4:2:2 10 bit) 1280 x 720: 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.
VIDEO OUTPUT FORMAT: HDMI	HDMI 3840 x 2160: 29.97P, 25.00P, 23.98P (4:2:2 10 bit) 1920 x 1080: 59.94P/59.94i, 50.00P/50.00i/25.00P, 29.97P/23.98P (4:2:2 10 bit) 1280 x 720: 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.
VIDEO OUTPUT FORMAT: IP	3840 x 2160: 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 1920 x 1080: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 1280 x 720: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 640 x 360: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) – If 59.94/50.00 Hz is selected for the frame frequency, the 3840 x 2160 format cannot be selected. – A frame rate that exceeds the frame frequency cannot be selected. – 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 59.94/50.00 Hz: 14.99 fps, when frame frequency is 23.98 Hz: 11.99 fps, when frame frequency is 29.97/25.00 Hz: 12.50 fps
VIDEO OUTPUT FORMAT: USB	Motion JPEG: 1920 x 1080 59.94 Hz: 12.00 fps, 5.00 fps 50.00 Hz: 12.50 fps, 5.00 fps 1280 x 720 59.94 Hz: 12.00 fps, 5.00 fps 50.00 Hz: 12.50 fps, 5.00 fps 640 x 360 59.94 Hz: 12.00 fps, 5.00 fps 50.00 Hz: 12.50 fps, 5.00 fps
PRESET	Number of presets: Max. 100 (including home position)

Interface

COMMUNICATION CONTROL	LAN, Wi-Fi, Serial, IR
NETWORK TERMINAL	LAN x 1, RJ45, 1000Base-T
3G-SDI OUT TERMINAL	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)
GEN-LOCK TERMINAL	-
HDMI OUT TERMINAL	HDMI connector x 1, output only
RS-422 TERMINAL	RJ45 connector x 1
INPUT 1/INPUT 2 TERMINALS	-
MIC TERMINAL	3.5 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)
USB TERMINAL	Type-A (USB 2.0) x 1 (future expansion) Type-C (USB 3.0) x 1

CR-N100: SPECIFICATIONS

4K UHD
1/2.3-inch type sensor for stunning quality

Hybrid AF
For fast and accurate focusing even in low light

20x Optical Zoom
35mm equivalent focal length of 29.3mm – 601mm (UHD only) plus an additional 20x digital zoom in FHD

Auto Tracking functionality
Follows a subject automatically as they move around

Support for wide range of Protocols
RTMP, NDI|HX*, RTP/RTSP, RTMPS, Canon XC Protocol and Standard Communications Protocol

Flexible connectivity
A wide range of connectors such as HDMI, LAN (PoE+), USB-C and 3.5mm Audio Jack

* NDI is a trademark or registered trademark of NewTek, Inc. in the United States and other countries.

CR-N100

A high quality 4K PTZ camera with advanced autofocus, 20x optical zoom and multiple IP protocols with built-in intelligent Auto Tracking.

Experience the flexibility of a 1/2.3-type 4K sensor and DIGIC DV6 processor with Hybrid AF and a 20x image stabilized optical zoom. Compatible with the Auto Tracking app*, and with built-in IP streaming and control protocols, this camera offers seamless integration for the corporate, education, houses of worship and live event industries.

CR-N100: HIGHLIGHTS

Outstanding 4K Imagery and HD oversampling
Capture powerful 4K UHD and superior Full HD images thanks to a 4K 1/2.3" type CMOS sensor and DIGIC DV6 image processor. Over Sampling HD processing delivers Full HD images from the 4K sensor which results in true-to-life HD video.

Precise focusing with Hybrid AF
Combining high-precision contrast AF with high-speed phase-detection AF, the CR-N100 delivers rapid and accurate focusing of the subject, even in low light conditions.

Multiple protocols for easy streaming and control
The CR-N100 features NDI|HX2 and SRT that produce high quality video streams for a variety of productions even under unstable network conditions. Stream seamlessly using RTMP/RTMPS to either Facebook or YouTube. Canon XC protocol unlocks the potential to control CR-N100 in a multiple PTZ camera system alongside Canon camcorder products.

Comprehensive connectivity
Connect flexibly with HDMI or IP (PoE+) both supporting 4K30P, the CR-N100 also includes a USB-C port, Serial Port (RS422) and a 3.5mm Audio Jack.

20x Optical zoom delivers incredible flexibility
Capture all the detail you need, thanks to Canon's advanced 4K optics with a flexible 20x optical zoom covering a broad focal length range of 29.3-601mm (35mm equivalent). Equipped with image stabilisation for minimal image disruption when moving.

Accurate Auto Tracking*
Unlock the potential to automatically track the main speaker with face detection as they move on stage. Achieve your ideal tracking setup with multiple adjustments, such as composition size, tracking sensitivity, exclusion zones, priority display area and more.

Smooth and precise control
The CR-N100 has a high-precision drive mechanism for fine Pan and Tilt movement as slow as 0.2°/s. Compatible with the RC-IP100, RC-IP1000 controller and Remote Camera Control Application controllers, it can also be configured with selected third-party units.

* Free Auto Tracking App RA-AT001(Lite) available via new FW,1.5.0 or later. Paid license is required for full functionality of auto tracking

Specifications in Detail

IMAGE SENSOR	Type 1/2.3 (1/2.3 in.) single-plate CMOS sensor
EFFECTIVE PIXELS	approx. 8.29 megapixels (3840 x 2160)
LENS	f=3.67 – 73.4 mm, F/1.8 – 2.8, 20x optical zoom, 8-bladed circular aperture
OPTICAL ZOOM	20x optical zoom
DIGITAL ZOOM	20x digital zoom
FOCAL LENGTH	3.67 – 73.4 mm, f/1.8 – 2.8, 35mm equivalent focal length: [4K UHD] approx. 29.3 (W) – 601 mm (T) [Full HD] approx. 30.5 (W) – 627 mm (T)
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)
MINIMUM SUBJECT ILLUMINATION	Approx. 1.5 lux (shutter speed 1/30 sec., frame rate 59.947P (P (Programmed AE) shooting mode, auto slow shutter on)
SHUTTER SPEED	1/6 – 1/2000 sec. (specific values depend on the frame frequency and frame rate)
IRIS	Manual/Automatic aperture
GAIN	0.0 dB – 36 dB
ND FILTER	Built-in (1/8 at maximum, gradation ND), motor operated
NIGHT MODE (IR CUT FILTER OFF)	No
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.
FOCUS	Focus mode: Manual, Continuous AF, Face AF, Tracking AF type: Hybrid AF, Contrast AF
MINIMUM FOCUSING DISTANCE	-
GAMMA	Normal1 (Standard), Normal3 (BT.709)
PAN AND TILT	Pan operation range: Horizontal ±170° Pan operation speed: 0.2° – 300°/sec.

Physical Features

OPERATING ENVIRONMENT	Temperature 0°C – +40°C (+32°F – +104°F) Humidity 10% – 90% (without condensation)
POWER SUPPLY	PoE: PoE+ power supply via LAN connector (IEEE802.3at compliant) – PoE cannot be used External power source: 24 V DC (using included AC adaptor)
POWER CONSUMPTION	PoE+ Input: Approx. 16.2 W* max. (body only) DC Input: Approx. 15.0 W max. (body only) * Class 4 (25.5 W required) for power supply devices
DIMENSIONS (WXHXD)	Approx. 154 x 178 x 164 mm (excluding protrusions)
WEIGHT	Approx. 2.2 kg (4.86 lb.) (body only)
IP RATING	-
WIPER	-
NOISE	NC35 or less

Server

VIDEO OUTPUT FORMAT: SDI	-
HDMI	3840 x 2160: 29.97P, 25.00P, 23.98P (4:2:2 10 bit) 1920 x 1080: 59.94P/59.94i, 50.00P/50.00i/25.00P, 29.97P/23.98P (4:2:2 10 bit) 1280 x 720: 59.94P, 50.00P (4:2:2 10 bit)
IP	[Frame frequency 59.94 Hz] 1920 x 1080: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 1280 x 720: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 640 x 360: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) [Frame frequency 29.97 Hz] 3840 x 2160: 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 1920 x 1080: 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 1280 x 720: 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 640 x 360: 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) [Frame frequency 50.00 Hz] 1920 x 1080: 50.00 fps, 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) 1280 x 720: 50.00 fps, 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) 640 x 360: 50.00 fps, 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) [Frame frequency 25.00 Hz] 3840 x 2160: 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) 1920 x 1080: 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) 1280 x 720: 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) 640 x 360: 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) [Frame frequency 23.98 Hz] 3840 x 2160: 23.98 fps, 11.99 fps, 5.99 fps (4:2:0 8 bit) 1920 x 1080: 23.98 fps, 11.99 fps, 5.99 fps (4:2:0 8 bit) 1280 x 720: 23.98 fps, 11.99 fps, 5.99 fps (4:2:0 8 bit) 640 x 360: 23.98 fps, 11.99 fps, 5.99 fps (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 Motion JPEG: 1920 x 1080
USB	59.94 Hz: 12.00 fps, 5.00 fps 50.00 Hz: 12.50 fps, 5.00 fps 1280 x 720 59.94 Hz: 12.00 fps, 5.00 fps 50.00 Hz: 12.50 fps, 5.00 fps 640 x 360 59.94 Hz: 12.00 fps, 5.00 fps 50.00 Hz: 12.50 fps, 5.00 fps
PROTOCOL	Canon XC, RTSP/RTP, NDI|HX, RTMP/RTMPS, Standard Communication (Serial), Standard Communication (IP), SRT,
PRESET	Number of presets: Max. 100 (including home position)

Interface

COMMUNICATION CONTROL	LAN, Serial, IR
NETWORK TERMINAL	LAN x 1, RJ45, 1000Base-T
12G-SDI OUT TERMINAL	No
6G-SDI OUT TERMINAL	No
3G-SDI OUT TERMINAL	-
GEN-LOCK TERMINAL	No
TIME CODE TERMINAL	No
HDMI OUT TERMINAL	HDMI connector x 1, output only
RS-422 TERMINAL	RJ45 connector x 1
AUDIO INPUT 1/INPUT 2 TERMINALS	No
MIC TERMINAL	3.5 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)
USB TERMINAL	Type-C (USB 3.1) x 1
EXTERNAL DEVICE I/O TERMINAL	-

Canon

4K

CR-X500: SPECIFICATIONS

4K UHD
1.0-type CMOS sensor for stunning quality

All Weather Construction
IP55 rated for high levels of dust and water resistance

Professional Connectivity
Supports 12G-SDI interface for video and RS-422 serial communication for control

4 Axis Image Stabilisation
Exceptional stability for smooth PTZ operation

15x Optical Zoom
From wide-angle to telephoto, with a focal length range of 25.5-382.5mm

Dual DV6 Processor
Powerful image processing which guarantees fantastic results

Dual Pixel CMOS AF
For smooth, fast and accurate focusing

3 Axis Simultaneous Operation
Pan, Tilt and Zoom simultaneously to smoothly move from one shot to the next

CR-X500

Capture incredible 4K UHD footage in a variety of conditions thanks to this weather resistant IP55 rated outdoor PTZ camera, boasting a 15x optical zoom and 12G-SDI connectivity.

Capture exceptional 4K UHD footage up to 60P in a variety of weather and temperatures thanks to the tough, durable IP55 rated CR-X500, it is designed for outdoor use in fixed or semi permanent locations, making it suitable for a wide range of broadcast or monitoring applications. Boasting a 1" sensor and a 15x optical zoom with Dual Pixel Auto focus and 12G-SDI connectivity, it offers assured high-quality footage that you can rely on.

Specifications in Detail

IMAGE SENSOR	1.0 Type CMOS
EFFECTIVE PIXELS	8.29 million effective pixels (3840 x 2160)
LENS	8.3 -124.5 mm F 2.8 -4.5, Optical 15 times (30 x with advanced zoom)
MINIMUM SUBJECT ILLUMINATION	Lux: 2.5 lux (50.00 Hz , + 33 dB , Shutter 1/50)
SHUTTER SPEED	Auto, Manual (1/3 to 1/1000 sec)
IRIS	Auto, Manual
GAIN	Auto, Manual (0 to + 33 dB)
ND FILTER	1/1, 1/4, 1/16, 1/64 (4 Positive)
WHITE BALANCE	Auto, Set
COLOUR SAMPLES	4:2:2 10 bit
IMAGE QUALITY ADJUSTMENT	Custom Picture Menu
FOCUS	Auto (Dual Pixel AF)
OPERATING ANGLE	PAN: -170 °-+ 170 °, T: -50 °-+ 30 °
OPERATING SPEED	PAN: 0.5 ° -25 °/s, TILT: 0.3 ° -20 °/s
STATIC ACCURACY	± 7 or Less
WIPER	Yes
WASHER	With Control Terminal
CONNECTIONS	DC, Control, SDI, GENLOCK, AUX
WIND RESISTANCE	0 -25 m/s normal operation 25 -35 m/s Operable 35 -60 m/s Normal Recovery Possible (Non-Destructive operation at 60 m/s or less)
NOISE	NC55 or less when operating speed is 10°/sec or less
EXTERIOR FINISH	Salt-resistant specification
TURNING RADIUS	PAN: 620 mm TILT: 430 mm
PROTOCOL	U -4/NU

Physical Features

OPERATING ENVIRONMENT	-15 -40 ° C/90% or Less (No condensation)
DUSTPROOF & WATERPROOF	IP 55
POWER CONSUMPTION	10.5 DC -15 V 90W
DIMENSIONS (WXHXD)	337 (W) x 390 (H) x 386 (D) mm *Not including waterproof tubes
WEIGHT	Approximately 17 kg

CR-X500: HIGHLIGHTS

Powerful 4K Imagery
A 1.0-type sensor and dual DIGIC DV6 processors delivers superb 4K UHD images. Adjust image quality settings such as Black Level, Gamma, Knee and White Balance for optimum quality.

Robust and Durable Body
Rated IP55 water and dust resistant with additional salt repellence to perform from -15° to +40°C and in 90% humidity, the fully sealed body also features an inbuilt wiper for a clear view.

Precise Control for Exceptional Footage
The CR-X500 features an advanced drive mechanism which allows slow left and right panning down to 0.5°/s. The camera is also compatible with the RC-IP100 Controller via serial connection, ensuring it delivers the perfect shot.

High Quality Connectivity
Featuring a capable 12G-SDI output which can support 4K UHD up 60P at 4:2:2 10-bit, the CR-X500 produces incredible imagery and can seamlessly integrate into most workflows.

15x UHD Optical or 30x Full HD Zoom
Capture all the detail thanks to a stabilised 15x zoom (25.5-382.5mm 35mm equivalent) that gets you close in 4K, and closer still in Full HD thanks to its 30x advanced zoom capability.

Dual Pixel CMOS AF for Ultimate Sharpness
The CR-X500 offers continuous AF within 80% of the sensor area. It's a fast and accurate system ensuring flexible focus across a wide range of subjects including objects and people.

HDR and Wide Colour Gamut for Stunning Results
Capture and deliver powerful HDR imagery via Canon Log 3 or Wide Dynamic Range modes. Along with a BT.2020 wide colour space, it provides excellent flexibility.

3 Axis Simultaneous Operation
The CR-X500 is capable of Pan, Tilt and Zoom movements simultaneously when executing pre-sets, ensuring the movement of the camera is more fluid. The speed of all three movements are independently adjusted to ensure the Pan Tilt and Zoom all finish at the same time to deliver a truly professional experience.

Canon

4K

CR-X300: SPECIFICATIONS

4K UHD
1/2.3-inch type sensor for stunning quality

DIGIC DV6 Image Processor
Powerful image processor that can capture up to 4K 30P at 4:2:2/10-bit

Hybrid AF
For fast and accurate focusing even in low light

20x Optical Zoom
35mm equivalent focal length of 29.3mm – 601mm (UHD only) plus an additional 20x digital zoom in FHD

Support for wide range of Protocols
RTMP, NDI|HX*, RTP/RTSP, RTMPS, Canon XC Protocol and Standard Communications Protocol

IP65 rated
Water and dust resistant

* NDI is a trademark or registered trademark of NewTek, Inc. in the United States and other countries.

Specifications in Detail

IMAGE SENSOR	Type 1/2.3 (1/2.3 in.) single-plate CMOS sensor
EFFECTIVE PIXELS	approx. 8.29 megapixels (3840 x 2160)
LENS	f=3.67 – 73.4 mm, F/1.8 – 2.8, 20x optical zoom, 8-bladed circular aperture
OPTICAL ZOOM	20x optical zoom
DIGITAL ZOOM	20x digital zoom
FOCAL LENGTH	3.67 – 73.4 mm, f/1.8 – 2.8, 35mm equivalent focal length: [4K UHD] approx. 29.3 (W) – 601 mm (T) [Full HD] approx. 30.5 (W) – 627 mm (T)
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)
MINIMUM SUBJECT ILLUMINATION	Approx. 3.0 lux (shutter speed 1/60 sec., frame frequency 59.94 Hz (P (Programmed AE) shooting mode), auto slow shutter off)
SHUTTER SPEED	1/6 – 1/2000 sec. (specific values depend on the frame frequency and frame rate)
IRIS	Manual/Automatic aperture
GAIN	0.0 dB – 36 dB
ND FILTER	ND filter: 1/8 at maximum Enhanced ND filter: 1/32
IR MODE (IR CUT FILTER OFF)	Yes, Electrically switchable
WHITE BALANCE	AUTO (AWB), Set A, Set B, preset settings (daylight: 5,600 K*, tungsten lamp: 3,200 K*), colour temperature setting (2,000 K – 15,000 K), Manual * colour temperatures are given for reference purposes only.
FOCUS	Focus mode: Manual, Continuous AF, Face Detection AF, Tracking AF type: Hybrid AF, Contrast AF
MINIMUM FOCUSING DISTANCE	1 cm (0.39 in.) at full wide angle, 60 cm (2.0 ft.) (from the front window)
GAMMA	Normal1, Normal3
PAN AND TILT OPERATION RANGE	Horizontal ±180°, Vertical -40° – +215°
PAN AND TILT OPERATION SPEED	0.3° – 60°/sec
CONTROL PROTOCOL	XC (Canon's original), NU (Canon's original), NDI|HX, Standard Communication (Serial), Standard Communication (IP)

Physical Features

OPERATING ENVIRONMENT	[Temperature/Humidity Resistance] Temperature Operating Temperature Range -15°C – +40°C (+5°F – +104°F) Start-up Temperature Range -10°C – +40°C (+14°F – +104°F) Humidity 90% or less (without condensation) [Survival Wind Speed] 15 m/sec.: Normal operation 30 m/sec.: Operation possible 60 m/sec.: Non destruction
POWER SUPPLY	PoE: PoE++ power supply via LAN connector (IEEE802.3bt compliant) – PoE and PoE+ cannot be used External power source: 12 V DC (Use the included power cable with DC plug)
POWER CONSUMPTION	PoE++ Input: Approx. 39.8 W* max. (body only) DC Input: Approx. 37.7 W max. (body only)
DIMENSIONS (WXHXD)	Approx. 217 x 311 x 217 mm (8.54 x 12.24 x 8.54 in.) (excluding protrusions)
WEIGHT	Approx. 7.0 kg (15.5 lb.) (body only)
IP RATING	IP65
WIPER	Equipped
NOISE	NC45 or lower (when operating at 60°/sec.)

* Class 5 (40.0 W required) for power supply devices

Server

VIDEO OUTPUT FORMAT: SDI	3840 x 2160: 29.97P, 25.00P, 23.98P (4:2:2 10 bit) 1920 x 1080: 59.94P/59.94i, 50.00P/50.00i/25.00P, 29.97P/23.98P (4:2:2 10 bit) 1280 x 720: 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 SDI, video will not be outputted to HDMI.
HDMI	3840 x 2160: 29.97P, 25.00P, 23.98P (4:2:2 10 bit) 1920 x 1080: 59.94P/59.94i, 50.00P/50.00i/25.00P, 29.97P/23.98P (4:2:2 10 bit) 1280 x 720: 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: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 1280 x 720: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 640 x 360: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) [Frame frequency 29.97 Hz] 3840 x 2160: 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 1920 x 1080: 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 1280 x 720: 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 640 x 360: 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) [Frame frequency 50.00 Hz] 1920 x 1080: 50.00 fps, 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) 1280 x 720: 50.00 fps, 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) 640 x 360: 50.00 fps, 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) [Frame frequency 25.00 Hz] 3840 x 2160: 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) 1920 x 1080: 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) 1280 x 720: 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) 640 x 360: 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit) [Frame frequency 23.98 Hz] 3840 x 2160: 23.98 fps, 11.99 fps, 5.99 fps (4:2:0 8 bit) 1920 x 1080: 23.98 fps, 11.99 fps, 5.99 fps (4:2:0 8 bit) 1280 x 720: 23.98 fps, 11.99 fps, 5.99 fps (4:2:0 8 bit) 640 x 360: 23.98 fps, 11.99 fps, 5.99 fps (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 VIDEO TRANSMISSION	No
PROTOCOL	Protocol: XC (Canon's original), RTSP/RTP, NDI|HX, RTMP/RTMPS
PRESET	Number of presets: Max. 100 (including home position)

Interface

COMMUNICATION CONTROL	LAN, Serial
NETWORK TERMINAL	LAN x 1, RJ45, 1000Base-T
SDI OUT TERMINAL	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)
GEN-LOCK TERMINAL	BNC jack x 1, 1.0 Vp-p/75 Ω, input only
HDMI OUT TERMINAL	HDMI connector x 1, output only
RS-422 TERMINAL	RJ45 connector x 1
INPUT 1/INPUT 2 TERMINALS	No
MIC TERMINAL	No
USB TERMINAL	No
EXTERNAL DEVICE I/O TERMINAL	AUX Connector x1

CR-X300

Capture rich detailed 4K footage indoors or outdoors. With a 1/2.3-inch type 4K CMOS Sensor, 20x optical zoom and powerful technologies from other Canon models all housed inside an IP65-rated compact, water and dust resistant body, the CR-X300 can perform in all conditions – from -15° to +40°C.

CR-X300: HIGHLIGHTS

Powerful 4K and Full HD imagery
A 1/2.3-inch type 4K/UHD CMOS Sensor with a DIGIC DV6 image processor captures detailed footage up to 4K 30P at 4:2:2/10-bit. Video can be output in Enhanced Full HD which benefits from 4K downsampling.

Versatile, high quality 20x optical zoom
CR-X300 has a 20x optical zoom lens with a focal length range of 29.3–601mm (35mm equivalent) in UHD. As well as an additional 20x digital zoom in FHD. The CR-X300 also features Canon's 4 Axis IS system for enhanced stability when shooting.

Advanced streaming and output options
The CR-X300 is highly flexible thanks to its 6G SDI and HDMI outputs, PoE++ as well as network connectivity that supports protocols such as Canon XC, RTP/RTSP, RTMP and NDI|HX video transmission plus standard communication and streaming protocols.

Smooth, precise control
The CR-X300 is capable of simultaneous high precision Pan, Tilt and Zoom as slow as 0.3deg/sec, even with pre-sets, and is compatible with Canon's RC-IP100 controller, Remote Camera Control Application plus selected third-party options.

Hybrid AF for precise focus
The CR-X300 combines high-precision contrast AF with high-speed phase-detection AF, ensuring accurate focus of the subject, even in low light.

Seamless High Quality 4K Video Streaming
With the free of charge Webcam Driver, you can enjoy seamless video streaming in up to 4K 30p with maximum 5 selected Canon PTZ Cameras via a simple ethernet connection. Compatible with most conferencing platforms and applications which require UVC, this Windows OS software is a virtual USB driver which allows an easy video streaming integration, ideal for video conferencing and online lectures.

For various lighting conditions
The CR-X300 is equipped with an internal 1/8 graduated type ND filter with equipped Enhanced 1/32 ND Filter to help control exposure. For very low light conditions, IR mode allows capture in almost complete darkness.

Custom picture settings
The CR-X300 features a custom picture menu which allows for fine tuning of image settings in a wide range of shooting scenarios with other cameras such as Cinema EOS, for efficient workflow in a multi camera setup.

Robust and durable body
Rated IP65 water and dust resistant with additional salt repellence to perform from -15° to +40°C and in 90% humidity, the fully sealed body also features an inbuilt wiper for a clear view.

AUTO LOOP APPLICATION (RA-AL001)

Programme repeated camera pan, tilt, and zoom movements to track repeated live action, consistently and accurately without the need of a camera operator. Auto Loop is a built-in (edge) application and not PC based, meaning easy installation without the need for powerful processing PCs.

Auto Loop Application: HIGHLIGHTS

Flexibility of programming of movements
Able to initialize a Loop back and forth as programmed movement meaning no camera operator is required.

Smooth and precise control
Harnessing the power of Canon's advanced drive mechanism, the Auto Loop function enables precise automated control of movements of the PTZ camera.

Adaptable positions and routes
Set five separate pre-programmed loops each one of which can have a maximum of 4 positions making it ideal for a variety of live and recorded productions.

Two intuitive Loop modes
Continuous and reciprocal loop modes enable full flexibility of how the camera to moves. Continuous loop enables the camera to move from position A-B-C continuously on a loop whereas reciprocal loop allows the camera to move from position A-B-C- to position B-A-B to C-B-A.

Easy setting UI
Five automatic movements routes can be registered and easy to create/customize them from UI with preview video.

AUTO TRACKING APPLICATION (RA-AT001)

Unlock the potential to track the main speaker with face/head detection as they move around the stage, automatically.

Harness the power of excellent 4K PTZ imagery with effortless automation to add a new dimension to your productions. Auto Tracking is a built-in (edge) application and not PC based, meaning easy installation without the need for powerful processing PCs.

Free pre-installed auto tracking via latest firmware. Take advantage of Auto Tracking App RA-AT001 (Lite) to follow a subject automatically. A paid version (RA-AT001) unlocks extra versatility.

Auto Tracking Application: HIGHLIGHTS

Smooth and precise tracking
Canon's advanced drive mechanism enable the PTZ camera to track people at a variety of speeds from slow to rapid movements.

Priority display area
Tracks the subject but ensures boards, slides or displays are still always in the angle of view.

Pan/Tilt halting area
Prevents unwanted Pan, Tilt control that would track small swaying movements of a subject in their location.

Flexible composition
Adjust the composition of the tracking subject such as body size to ensure the perfect angle.

Fixed viewing angle area
Select an area to stop tracking when target is in that zone to maintain a specific angle.

Initial position reset
Moves the angle of view to a pre-set initial position when the tracking subject is lost to ensure something relevant is always captured.
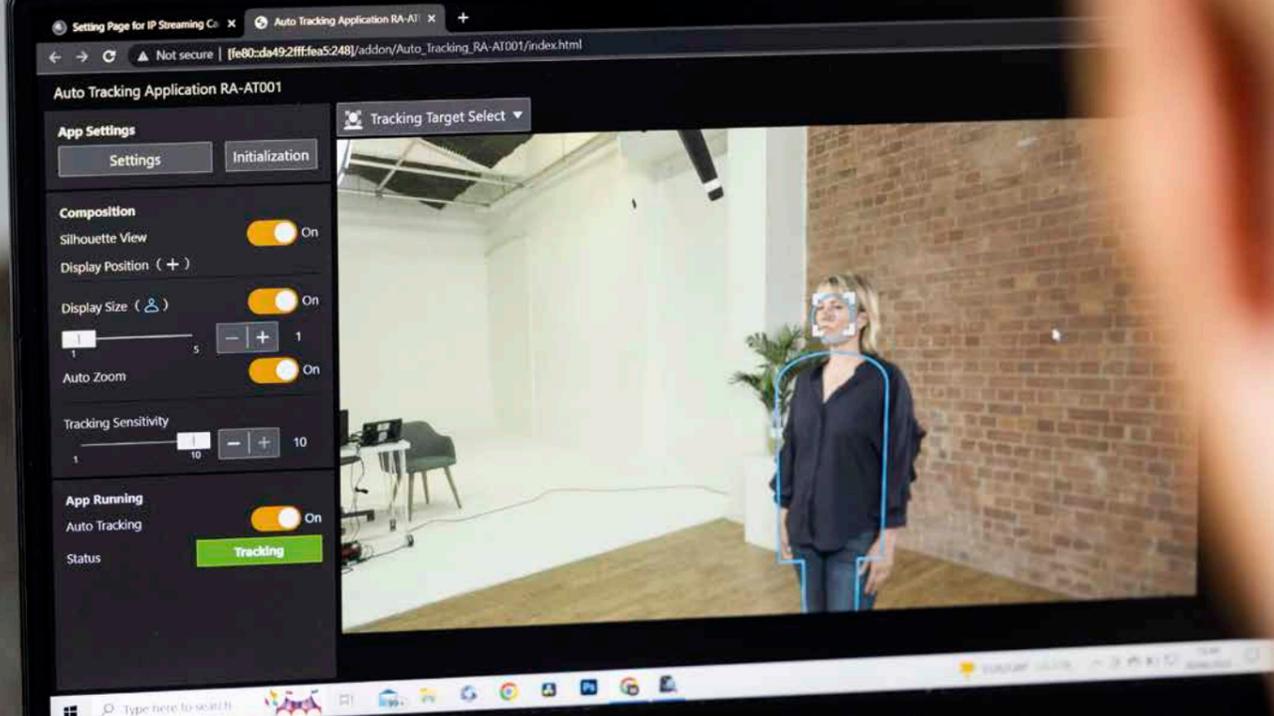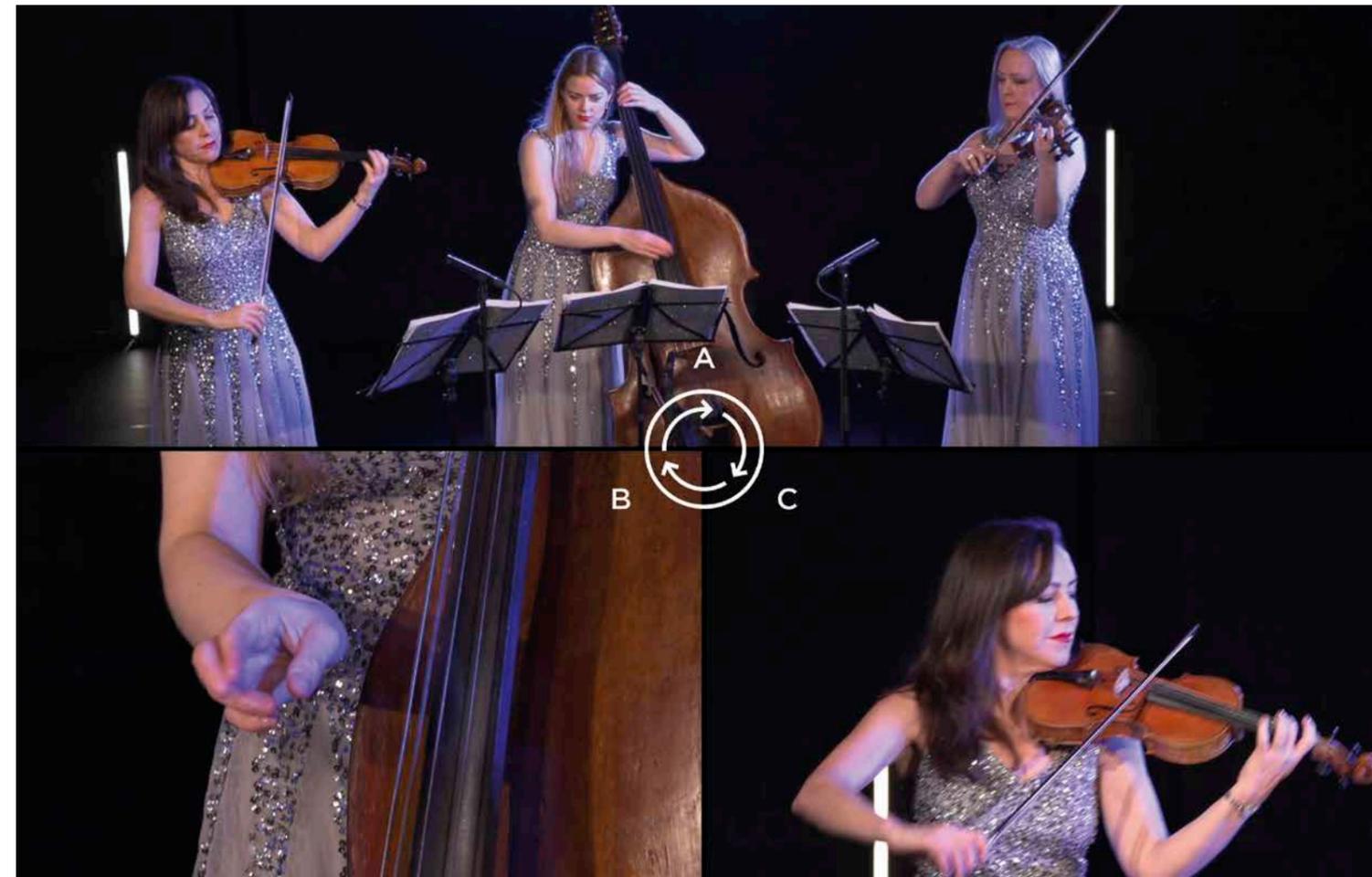
Dynamic tracking sensitivity
Finely adjust the 10 levels of sensitivity for slow or quick movements; the higher the number the more agile the PTZ camera tracking is meaning even dynamic movements can be captured.

Intelligent human detection
Automatically selects a human body present within a set area as the tracking subject for quick subject identification whilst manual target selection can also be initialized for more precise detection.

Auto select exclusion area
Create exclusion zones to ensure unwanted people aren't tracked, this ensures the focus is on the desired tracking subject.

Available on CR-N700, CR-N500, CR-N300 & CR-N100 only.

REMOTE CAMERA CONTROL APPLICATION

Complete your PTZ infrastructure with this free Canon software that enables control of up to 20 Canon PTZ cameras, nine of which can be shown as a live preview at any one time on the user interface.

Take control of your remote cameras with this free software controller, designed to operate up to 20 PTZ units over IP. Preview up to nine cameras on screen and make adjustments to focus, pan, zoom and tilt in real time, direct from your computer.

REMOTE CAMERA CONTROL APPLICATION: HIGHLIGHTS

Remote Control From Your Windows PC
Control up to 20 Canon PTZ cameras with nine of them being shown as a preview on the user interface at any one time. All you need is a laptop running Windows 10 and you're ready to go.

Monitor and View Settings Instantly
The on-screen display allows you to adjust your image settings such as iris, gain, white balance and more in real time and see the changes in real time.

Precise Adjustment and Control
The application allows you to fine tune the image settings of the chosen camera such as iris, white balance, gain and much more as well as adjust your pan, tilt and zoom speeds.

Control Over Wi-Fi with Tablet
The application is also compatible with tablets running Windows 10. Simply connect to the network your cameras are connected to over Wi-Fi to have full control over your production whilst moving around.

Auto Camera Registration
Canon's Auto Camera registration function locates all connected Canon cameras on the same IP network making set-up simple and quick.

Full Control Over Pre-Set Positions
Control up to 100 pre-set angles per camera and switch between positions with ease. Utilise the to allow recording of up to ten different movements (pan, tilt, zoom) which can be reproduced at the touch of a button.

Customisable Keyboard Control
Use your keyboard to control cameras and settings and assign keys to adjust pan, tilt, zoom control. Iris adjustment or gain settings can all be assigned giving you full control over your PTZ setup.

MULTI CAMERA MANAGEMENT APPLICATION

Monitor and manage up to 200 cameras direct from your PC and perform key tasks such as multi-view monitoring, device backup, assignment and registration as well as perform firmware updates to linked cameras simultaneously.

Multi Camera Management Application: HIGHLIGHTS

Supports large, multi-camera systems
Monitor and manage up to 200 cameras/controllers at once using the device grouping function to support efficient management before or during an operation.

Video and status monitoring
View the connection status and settings of each camera/controller as a list, monitor camera groups in a multi-view grid, and access the target camera from the browser setting page for full control.

Easier initial setup
Initial settings for multiple cameras can be done simultaneously plus camera settings can also be copied to multiple other cameras in one command. Camera assignment on controller can also be edited from this app.

Efficient management and maintenance
The PC application allows you to perform many important tasks together such as deliver firmware updates, perform backup/restore, restart/initialize and much more.

Cinema EOS compatible
Use the app across your production infrastructure. Copy camera settings between same models and even multiple cameras at once including C500 Mark II, C300 Mark III and C70 Cinema EOS cameras, plus the XF605 professional video camera and the Controller Unit.

RC-IP1000 REMOTE CAMERA CONTROLLER

The RC-IP1000 is a professional PTZ controller aimed at broadcast and live events. It is the standalone controller with no PC required to set up PTZ Cameras. It offers a high-quality ergonomic joystick and professional zoom rocker along with professional level inputs, outputs and connectivity plus a 7-inch touchscreen control for video monitoring and intuitive control.

RC-IP1000 REMOTE CAMERA CONTROLLER: HIGHLIGHTS

Tactile precision, professional control
Fine-tune PTZ camera movements using the ergonomically designed joystick, designed to fit comfortably into the palm of your hand for intuitive twisting control. A customisable button on the top allows even greater versatility such as One Shot AF and Return to Home position.

Multiple physical buttons and knobs
Control connected cameras thanks to 42 buttons and 14 dials that control functions such as Iris, Gamma, Knee and white balance. Backlit LEDs help general visibility while the professional zoom rocker ensures pinpoint accuracy when adjusting the zoom.

Multi-camera control made easy
Group all cameras together or up to ten in one group. Implement presets for multiple PTZ cameras at once as well as control others from Canon's PTZ and Cinema EOS1 ranges, plus the XF605 Pro Camcorder.

IP Video and Input Monitoring
Monitor and control Canon camera feeds quickly and easily on the 7-inch touchscreen via IP with up to nine being viewable at once in various layout options. Whatever camera is chosen, the touchscreen will automatically switch to show that live feed. Alternatively, output one full-screen feed to an external monitor via the 12G-SDI or HDMI port.

Intuitive touchscreen
Access a wide range of settings via the touchscreen. Set Focus Points and settings within touch AF, Face and Eye detection; control Manual Focus Point and adjust crop areas to enable two feeds to be sent out from one camera2.

Advanced Pre-Set and Trace control
Control another camera during a trace and set your other camera positions without having to wait until the trace/pre-set is finished. Register and manage presets and traces by naming them via the touchscreen and use the physical button on the RC-IP1000 for quick access to the pre-set and trace functionality.

Multiple camera control
Control multiple cameras by grouping them for easy control

PC-less Set-up of cameras
Register and system setup of cameras without PC

High quality joystick and zoom rocker
Ergonomic, comfortable design

IP Video and Input Monitoring
Monitor and control up to 200 cameras

7-inch touchscreen
View feeds plus adjust AF settings, crop areas and more.

Specifications

Physical Features

OPERATING ENVIRONMENT	0°C - 40°C
POWER SUPPLY	DC12V (PoE + with some restrictions)
DIMENSIONS (WXHXD)	W 342 mm x H 115 mm x D 245 mm (excluding controller level, protruding parts)
WEIGHT	approx. 3.5 kg (T.B.D.)
NO. OF CONNECTIBLE CAMERAS	200 (IP), 5 (Serial)
NO. OF CAMERA GROUPS	20 (10 units per 1 group)
VIDEO INPUT/OUTPUT	IP IN (video switch with camera selection; 2x2/3x3 multi-camera video display) 12G-SDI IN/OUT (2K/4K except through-out, no additional information such as audio/TimeCode) HDMI OUT (2K, no additional information such as audio/TimeCode)
PRESETS	Up to 100 for each camera (depends on camera specs)
HARD BUTTON SUPPORT FOR PRESETS	Yes (used with camera number buttons)
TRACE	Up to 10 for each camera (depends on camera specs)

RC-IP100 REMOTE CAMERA CONTROLLER

Pan, tilt and zoom effortlessly with this high-quality controller featuring a multi-function joystick and intuitive touchscreen for easy control of up to 100 cameras over IP.

Take control of your remote cameras with this robust and compact hardware controller, designed to operate up to 100 PTZ units over IP connection, Serial or both. A multi-function joystick along with an intuitive touch screen enables fast and precise adjustments in real time.

RC-IP100 REMOTE CAMERA CONTROLLER: HIGHLIGHTS

Control up to 100 Cameras Remotely
A multi camera set-up over IP is easy with the RC-IP100 and offers control of up to 100 PTZ units with just one operator and LAN cable, making remote production beautifully streamlined.

Perfect Precision with a Multifunction Joystick
A multi-function joystick allows precise adjustment over camera movements and settings while a control grip on top of the stick allows zoom, focus and iris control.

Assign and Refine with Custom Controls
With two user assignable buttons as well as two dedicated function buttons and customisable control knob on the joystick the user can optimise their setup for a wide range of shooting scenarios.

Flexible Connectivity
Equipped with Serial and LAN integration, control over IP based PTZ cameras is made easier and more intuitive, giving you greater freedom in controlling your setup.

Manage and Adjust with Fingertip Simplicity
An intuitive 7-inch (17.78 cm) touch screen allows easy switching between cameras as well as quick management of focus settings, white balance, shutter speeds and much more.

Pinpoint Zooming for the Perfect Shot
A professional zoom rocker enables smooth and precise wide-to-tele adjustments and lets you zoom with the same high degree of control as seen on pro camcorders.

Manage up to 100 Stored Positions
Appoint up to 100 pre-set angles per camera using the 7" touchscreen, and utilise the trace function to allow recording of up to ten different movements (pan, tilt, zoom) which can be reproduced at the touch of a button.

7-inch Touchscreen
For easy switching between up to 100 cameras and settings

Multi-function Joystick
Precisely adjust camera movements

Professional Zoom Rocker
For smooth and precise wide-to-tele adjustments

Customisable Keys
User assignable buttons and customisable control knob

Flexible Connectivity
Serial and LAN integration

Specifications

Physical Features

OPERATING ENVIRONMENT	Temperature 0°C – +40°C (+32°F – +104°F) Humidity 20% RH to 90% RH (No condensation)
POWER SUPPLY	12 VDC (When using the AC adapter)
POWER CONSUMPTION	Consumption: 0.6 A (When using the AC adapter)
DIMENSIONS (WXHXD)	Width 350 x Height 110 x Depth 182 mm
WEIGHT	2.1kg
IP RATING	-

COMPARISON CHART

	CR-N700	CR-N500	CR-N300	CR-N100	CR-X500	CR-X300
	Indoor PTZ Camera available in Satin black/Titanium white	Indoor PTZ Camera available in Satin Black/Titanium White	Indoor PTZ Camera available in Satin Black/Titanium White	Indoor PTZ Camera available in Satin Black/Titanium White	Outdoor PTZ Camera available in Titanium White	Outdoor PTZ Camera available in Titanium White
SENSOR TYPE	Type 1.0 (1.0 in.) single-plate CMOS sensor	Type 1.0 (1.0 in.) single-plate CMOS sensor	Type 1/2.3 (1/2.3 in.) single-plate CMOS sensor	Type 1/2.3 (1/2.3 in.) single-plate CMOS sensor	Type 1.0 (1.0 in.) single-plate CMOS sensor	Type 1/2.3 (1/2.3 in.) single-plate CMOS sensor
EFFECTIVE PIXELS	Approx. 8.29 megapixels (3840 x 2160)	Approx. 8.29 megapixels (3840 x 2160)	Approx. 8.29 megapixels (3840 x 2160)	Approx. 8.29 megapixels (3840 x 2160)	Approx. 8.29 megapixels (3840 x 2160)	Approx. 8.29 megapixels (3840 x 2160)
OPTICAL ZOOM	15x optical zoom (30 x with advanced zoom)	15x Optical Zoom	20x optical zoom	20x optical zoom	15x optical zoom (30 x with advanced zoom)	20x optical zoom
DIGITAL ZOOM	20x digital zoom	20x digital zoom	20x digital zoom	20x digital zoom	-	20x digital zoom
FOCAL LENGTH	8.3 – 124.5 mm, f/2.8 – 4.5, 35mm equivalent focal length: approx. 25.5 (W) – 382.5 mm (T)	8.3 – 124.5 mm, f/2.8 – 4.5, 35mm equivalent focal length: approx. 25.5 (W) – 382.5 mm (T)	3.67 – 73.4 mm, f/1.8 – 2.8, 35mm equivalent focal length: [4K UHD] approx. 29.3 (W) – 601 mm (T) [Full HD] approx. 30.5 (W) – 627 mm (T)	3.67 – 73.4 mm, f/1.8 – 2.8, 35mm equivalent focal length: [4K UHD] approx. 29.3 (W) – 601 mm (T) [Full HD] approx. 30.5 (W) – 627 mm (T)	8.3 – 124.5 mm, f/2.8 – 4.5, 35mm equivalent focal length: approx. 25.5 (W) – 382.5 mm (T)	3.67 – 73.4 mm, f/1.8 – 2.8, 35mm equivalent focal length: [4K UHD] approx. 29.3 (W) – 601 mm (T) [Full HD] approx. 30.5 (W) – 627 mm (T)
MINIMUM SUBJECT ILLUMINATION	Approx. 3.0 lux	Approx. 1.5 lux	Approx. 1.5 lux	approx. 1.5 lux	Approx. 2.5 lux	approx 3 lux
ND FILTER	Built-in (Off, 1/4, 1/16, 1/64), Motor-operated	Built-in (O , 1/4, 1/16, 1/64), Motor-operated	Built-in (1/8 at maximum, gradation ND), Motoroperated	Built-in (1/8 at maximum, gradation ND), motor operated	Built-in (O , 1/4, 1/16, 1/64), Motor-operated	ND filter: 1/8 at maximum Enhanced ND filter: 1/32
NIGHT MODE	Yes	-	-	-	-	Yes
FOCUS TYPE	Dual Pixel CMOS AF	Dual Pixel CMOS AF	Hybrid AF	Hybrid AF	Dual Pixel CMOS AF	Hybrid AF
FOCUS MODES	Manual, AF-boosted MF, Continuous AF, Face AF, Tracking	Manual, AF-boosted MF, Continuous AF, Face AF, Tracking	Manual, Continuous AF, Face AF, Tracking	Manual, Continuous AF, Face AF, Tracking	Manual, AF-boosted MF, Continuous AF, Face AF, Focus Tracking	Manual, Continuous AF, Face AF, Tracking
PAN & TILT	Pan operation range: Horizontal ±170° Pan operation speed: 0.1° – 100°/sec. Tilt operation range: Vertical -30° – +90° Tilt operation speed: 0.1° – 100°/sec.	Pan operation range: Horizontal ±170° Pan operation speed: 0.1° – 100°/sec. Tilt operation range: Vertical -30° – +90° Tilt operation speed: 0.1° – 100°/sec.	Pan operation range: Horizontal ±170° Pan operation speed: 0.2° – 300°/sec. Tilt operation range: Vertical -30° – +100° Tilt operation speed: 0.2° – 170°/sec.	Pan operation range: Horizontal ±170° Pan operation speed: 0.2° – 300°/sec. Tilt operation range: Vertical -30° – +100° Tilt operation speed: 0.2° – 170°/sec.	Pan operation range: Horizontal ±170° Pan operation speed: 0.5 ° -25 °/s Tilt operation range: Vertical -50 ° – +30 ° Tilt operation speed: 0.3 ° -20 °/s	Pan operation range: Horizontal ±180° Tilt operation range: Vertical -40° – +215° Operation Speed: 0.3° – 60°/sec.
PROTOCOLS	Canon XC Protocol, RTSP/RTP, NDI|HX, RTMP/ RTMPS, Standard Communication (Serial), Standard Communication (IP), SRT, FreeD *NDI® is a registered trademark of NewTek, Inc.	NDI|HX*, XC Protocol (Canon Protocol), RTP/RTSP, RTMP/RTMPS, Standard Communication (Serial), Standard Communication (IP), SRT and FreeD Protocol * NDI is a trademark or registered Trademark of NewTek inc. in the United States and other Regions	NDI|HX*, XC Protocol (Canon Protocol), RTP/RTSP, RTMP/RTMPS, Standard Communication (Serial), Standard Communication (IP), SRT and FreeD Protocol * NDI is a trademark or registered Trademark of NewTek inc. in the United States and other Regions	NDI|HX*, XC Protocol (Canon Protocol), RTP/RTSP, RTMP/RTMPS, Standard Communication (Serial), Standard Communication (IP), SRT and FreeD Protocol *NDI is a trademark or registered Trademark of NewTek inc. in the United States and other Regions	U-4/NU	NDI|HX*, XC Protocol (Canon Protocol), RTP/RTSP, RTMP/RTMPS, Standard Communication (Serial), Standard Communication (IP), Protocol * NDI is a trademark or registered Trademark of NewTek inc. in the United States and other Regions
VIDEO OUTPUT CONNECTIONS	12G-SDI/3G-SDI/HDMI/IP (RJ45)4:2:2 10-bit [3G-SDI] Up to FHD 60P/50P 4:2:2 10-bit	3G-SDI, HDMI, IP (RJ45)	3G-SDI, HDMI, IP (RJ45) & USB	HDMI, IP (RJ45) & USB	12G-SDI	6G-SDI, HDMI, IP (RJ45)
VIDEO FORMAT (SDI)	[12G-SDI] Up to 4K UHD 60P/50P 4:2:2 10-bit [3G-SDI] Up to FHD 60P/50P 4:2:2 10-bit	Up to FHD 60P/50P 4:2:2 10-bit	Up to FHD 60P/50P 4:2:2 10-bit	-	Up to 4K UHD 60P/50P 4:2:2 10-bit	Up to 4K UHD 30P/25P 4:2:2 10-bit
VIDEO FORMAT (HDMI)	Up to 4K UHD 60P/50P 4:2:2 10-bit	Up to 4K UHD 30P/25P 4:2:2 10-bit	Up to 4K UHD 30P/25P 4:2:2 10-bit	Up to 4K UHD 30P, 4:2:2 10-bit	-	Up to 4K UHD 30P/25P 4:2:2 10-bit
VIDEO FORMAT (IP)	Up to 4K UHD 60fps/50fps 4:2:0-8bit	Up to 4K UHD 30fps/25fps 4:2:0-8bit	Up to 4K UHD 30fps/25fps 4:2:0-8bit	Up to 4K UHD 30fps/25fps 4:2:0-8bit	-	Up to 4K UHD 30fps/25fps 4:2:0-8bit
OPERATING ENVIRONMENT	Temperature 0°C – +40°C (+32°F – +104°F) Humidity 10% – 90% (without condensation)	Temperature 0°C – +40°C (+32°F – +104°F) Humidity 10% – 90% (without condensation)	Temperature 0°C – +40°C (+32°F – +104°F) Humidity 10% – 90% (without condensation)	Temperature 0°C – +40°C (+32°F – +104°F) Humidity 10% – 90% (without condensation)	Temperature Range -15 -40 °C Humidity 90% or Less (No condensation)	Temperature Range -15°C – +40°C (+5°F – +104°F) Humidity 90% or less (no condensation)
POWER SUPPLY	PoE: PoE++ power supply via LAN connector (IEEE802.3bt compliant) – PoE and PoE+ cannot be used External power source: 12 V DC	PoE: PoE+ power supply via LAN connector (IEEE802.3at compliant) – PoE cannot be used External power source: 24 V DC (using included AC adaptor)	PoE: PoE+ power supply via LAN connector (IEEE802.3at compliant) – PoE cannot be used External power source: 24 V DC (using included AC adaptor)	PoE: PoE+ power supply via LAN connector (IEEE802.3at compliant) – PoE cannot be used External power source: 24 V DC (using included AC adaptor)	10.5 DC -15 V 90W	PoE: PoE++ power supply via LAN connector (IEEE802.3bt compliant) – PoE and PoE+ cannot be used External power source: 12 V DC (Use the included power cable with DC plug)
POWER CONSUMPTION*	PoE++ Input: Approx. xxx(TBD) W* max. (body only) DC Input: Approx. xxx(TBD) W max. (body only) *Class 5 (40.0 W required) for power supply devices	PoE+ Input: Approx. 19.6 W* max. (body only) DC Input: Approx. 18.6 W max. (body only) *Class 4 (25.5 W required) for power supply devices	PoE+ Input: Approx. 16.2 W* max. (body only) DC Input: Approx. 15.0 W max. (body only) *Class 4 (25.5 W required) for power supply devices	PoE+ Input: Approx. 16.2 W* max. (body only) DC Input: Approx. 15.0 W max. (body only) *Class 4 (25.5 W required) for power supply devices	10.5 DC -15 V 90W	PoE++ Input: Approx. 39.8 W* max. (body only) DC Input: Approx. 37.7 W max. (body only) *Class 5 (40.0 W required) for power supply devices
DIMENSIONS	Approx. 200 x 269 x 208 mm (excluding protrusions)	Approx. 200 x 269 x 208 mm (excluding protrusions)	Approx. 154 x 178 x 164 mm (excluding protrusions)	Approx. 154 x 178 x 164 mm (excluding protrusions)	337 (W) x 390 (H) x 386 (D) mm *Not including waterproof tubes	Approx. 217 x 311 x 217 mm (8.54 x 12.24 x 8.54 in.) (excluding protrusions)
WEIGHT	Approx. 4.3 kg (9.5 lb.) (body only)	Approx. 4.1 kg (9.04 lb.) (body only)	Approx. 2.2 kg (4.86 lb.) (body only)	Approx. 2.2 kg (4.86 lb.) (body only)	Approx. 17 kg	Approx. 7.0 kg (15.5 lb.) (body only)
IP RATING	-	-	-	-	IP55	IP65
WIPER	-	-	-	-	Equipped	Equipped
NOISE	NC 30 or less	NC 30 or less	NC 35 or less	NC35 or less	NC 55 or lower (when operating at 10°/sec)	NC45 or lower (when operating at 60°/sec.)

Canon

PLEASE RECYCLE