

SONY

HDC-P31 Multi-Purpose Camera



SR Live
for HDR



New standard for premium HD

The HDC-P31 is a compact POV-style multi-purpose camera utilizing the sophisticated core technologies of our HDC series system cameras. The HDC-P31 is equipped with a Sony designed and manufactured three 2/3-inch HD CMOS sensor with global shutter. The HDC-P31's form factor allows it to be placed virtually anywhere, and its LAN-based systemization allows it to be controlled from anywhere. The HDC-P31 delivers high-quality HD HDR pictures and has all the operational control expected of a Sony HDC camera as a standalone or part of an HDC camera system.

No-compromise image quality

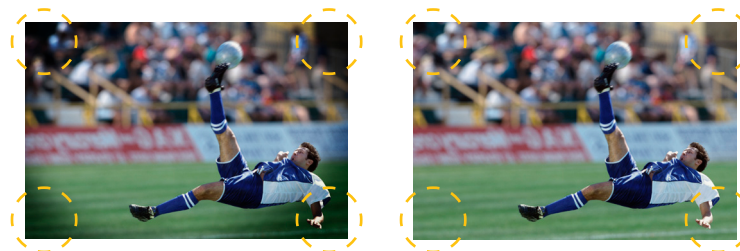
Highly sensitive three 2/3-inch global shutter CMOS sensors

The HDC-P31 offers premium pictures with the latest 2/3-inch CMOS sensor with Global Shutter technology. The new sensor allows the HDC-P31 to work with a wide range of lighting and set display fixtures while minimizing artefacts. The new imager and signal processor allow the HDC-P31 to capture pristine images with low noise (62dB) and excellent sensitivity (F12 at 1080/59.94p or F13 at 1080/50p).

F12/F13 62dB

ARIA: Automatic Restoration of Illumination Attenuation

F drop and peripheral light-loss are unwanted physical phenomena that often occur when shooting objects from a long distance away. With the newly developed ARIA function found in our HDC series cameras, the impact on picture appearance is automatically compensated for due to the processing inside the camera for the supported lens*.



ARIA OFF

ARIA ON

(Simulated images)

*Check with lens manufacturers for supported lens information.

Effective workflow for HDR production

HDR/SDR simultaneous production (SR Live)

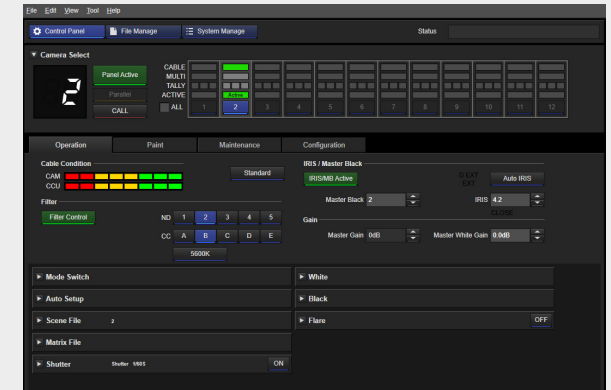
The HDC-P31 makes use of Sony's SR Live HDR system for live applications. This system enables the simultaneous creation of uncompromised HDR and SDR signals and without additional adjustments of either signal paths during production.

SR Live Metadata

The SR Live Metadata consists of a data packet that stores a rich set of parameter values corresponding to the real-time parameter settings of acquisition devices. From these values, an uncompromised, high quality reconstruction of the SDR signal can be carried out from the HDR production master, which can be easily monitored throughout the production pipeline.

Easy operation via software master control: HZC-CSM10

Software-based master control panel HZC-CSM10 enables comprehensive control and visualization of HDR workflow. All the HDC cameras can be linked via a network and quickly respond to central operations.

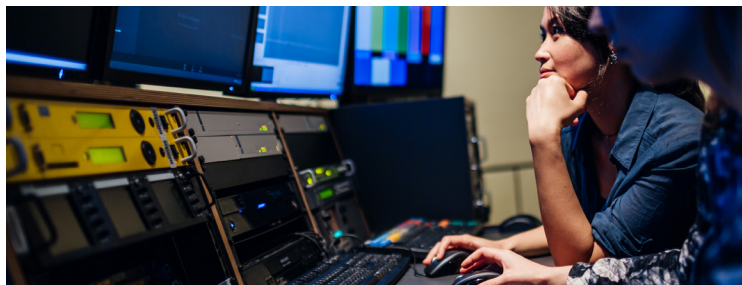


Sample of HZC-CSM10 GUI

Easy remote access in hard-to-reach places

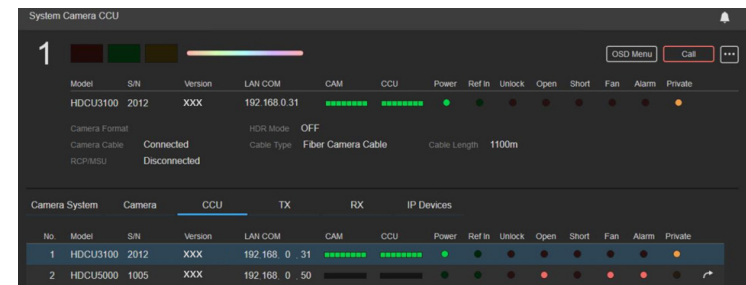
Quick setting from Web UI

The HDC-P31 supports Web Access for operational control, status monitoring, and firmware upgrade via a network. Camera configurations can be changed remotely, negating the need of retrieving the camera from hard-to-reach positions, or uncoupling camera support systems.



RBF: Remote Back Focus

The back focus of a supported lens* can be remotely adjusted from a Sony master setup unit (MSU) or remote-control panel (RCP). This feature enables a single video engineer to check and adjust back focus from a premium monitoring area while the camera remains in its operating position. This also means that back focus adjustment can be performed quickly without having to guide a second technician through the process. Remote Back Focus can help to shorten preparations throughout the day.



Sample of CCU Web UI. The GUI design will change for POV.

*Check with lens manufacturers for supported lens information.

Specifications

General	
Power requirements	DC 10.5 V to 17 V
Operating temperature	-20°C to +45°C (-4°F to +113°F)
Storage temperature	-20°C to +60°C (-4°F to +140°F)
Weight	2.3 kg (5 lb 1 oz)
Camera section	
Imager	three-chip 2/3-inch type HD CMOS with global shutter
Effective resolution (H x V)	HD: 1920 x 1080
Signal format	1080/50i, 1080/59.94i, 720/50p, 720/59.94p (1080/23.98PsF, 1080/24PsF, 1080/25PsF, 1080/29.97PsF, 50/59.94p: option)
Spectrum system	F1.4 prism
Lens mount	Sony bayonet mount
Built-in filters	ND: 1: CLEAR, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND ECC: B:3200K, C:4300K, D:6300K
Sensitivity (at 2000 lx, 3200K, 89.9% reflectance)	F12 (at 1080/59.94i, 1080/59.94p), F13 (at 1080/50i, 1080/50p)
Noise level	62 dB
Horizontal resolution	1,000 TV lines (at center)
Shutter speed	1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 sec (1080/59.94i) 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 sec (1080/50i)
Inputs/outputs	
Genlock input	BNC (x1) HD: SMPTE 274M, tri-level sync, 0.6 Vp-p, 75 Ω SD: Black burst (NTSC: 0.286 Vp-p, 75 Ω/PAL: 0.3 Vp-p, 75 Ω)
SDI 1 output	BNC (x1), 3G/1.5G-SDI
SDI 2 output	BNC (x1), 3G/1.5G-SDI
SDI MONI	BNC (x1), HD-SDI
EXT I/O	D-sub 9-pin (female) (x1)
Remote	8-pin (x1)
Lens	12-pin (x1)
LAN	RJ-45 (x1), 10BASE-T, 100BASE-TX
Supplied accessories	
Tally number plate (1set), CD-ROM (1)	

Optional accessories

- HZC-CSM10 (Master Setup Unit PC software)
- MSU-1000/MSU-1500/MSU-3000/MSU-3500 (Master Setup Unit)
- RCP-1000/RCP-3500 series (Remote Control Unit)
- HZC-PRV50 (Operating software for 1080/59.94p and 1080/50p)
- HZC-PSF50 (Operating software for 1080/23.98PsF, 24PsF, 25PsF, and 29.97PsF)
- HZC-UG50 (Operation software for User Gamma/RGB444)

Rear view & dimensions

