4K

Sony proudly introduces to its lineup a point-of-view (POV)-style 4K camera, the HDC-P50, to increase your creativity, boost performance, and add flexibility while maintaining interchangeability with existing models.

The HDC-P50 is a highly compact POV-style multi-purpose camera based on Sony's sophisticated core technologies and equipped with the latest three 2/3-inch 4K CMOSs with Global Shutter.

The HDC-P50 offers shooting flexibility from almost anywhere and delivers high-quality 4K pictures as a standalone camera or system camera integrating seamlessly with the HDC-4300 and HDC-3500 Series. Precise adjustment of camera parameters can also be achieved with the remote control panel (RCP) and master setup unit (MSU) developed for Sony's HDC Series system cameras.

The compact and lightweight HDC-P50 is an ideal POV camera for a wide range of uses including unmanned studio robotics cameras, wireless applications with a Steadicam, and deployment at stadiums, gymnasiums, and other sporting events.

# Features

## Compact Design with High Picture Quality

Packed in a highly slim and compact body of only about 112 mm (4 1/2 inches) in width and weighing around 2.7 kg (5 lb 15 oz) excluding a lens, the HDC-P50 is equipped with three superb 2/3-inch 4K CMOSs with Global Shutter and Sony-developed digital processing LSI, achieving high picture quality equivalent to that of reputable HDC Series cameras.

The HDC-P50 is ideal for use in space-limited areas such as camera crane jibs, helicopter camera mounts, and stereoscopic 3D camera rigs.

## Dual Optical Servo Filters

The HDC-P50 is equipped with Neutral Density (ND) and Color Correction (CC) optical servo filter units, which can be remotely controlled according to lighting condition changes from a remote control panel (RCP) or a master setup unit (MSU).

## Master Setup Unit and Remote Control Panel

You can use the MSU-1000/MSU-1500 Master Setup Unit (MSU) and RCP-1000 Series Remote Control Panel (RCP) developed to adjust HDC-P50 camera parameters.

MSU-1000
Master Setup Unit

MSU-1500
Master Setup Unit

RCP-1000
Remote Control Panel

RCP-1001
Remote Control Panel
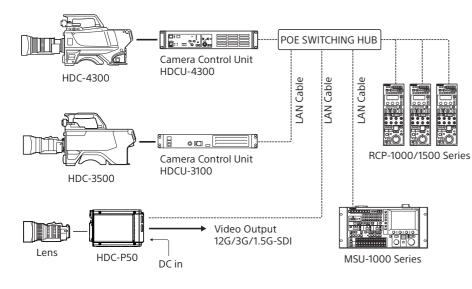
RCP-1500
Remote Control Panel

## Multi-Format Operation

This camera supports a wide range of capturing formats such as 1080/59.94i, 1080/50i, 1080/59.94p*[1], 1080/50p*[1], 720/59.94p, 720/50p, 1080/23.98PsF*[2], 24PsF*[2], 25PsF*[2], and 29.97PsF*[2].

*1 Optional HZC-PRVP50 software is required.
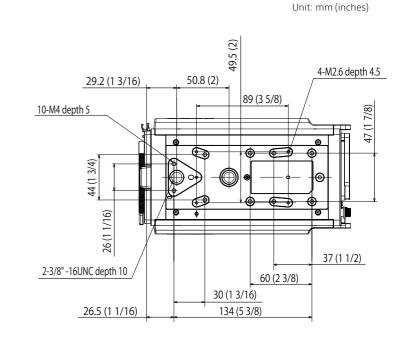
*2 Optional HZC-PSFP50 software is required.
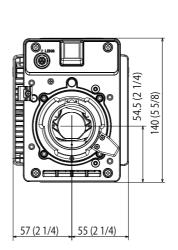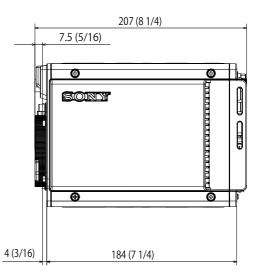
# System Configuration (LAN connection)



HDC-4300

Camera Control Unit
HDCU-4300

HDC-3500

Camera Control Unit
HDCU-3100

Lens

HDC-P50

DC in

LAN Cable

LAN Cable

LAN Cable

POE SWITCHING HUB

RCP-1000/1500 Series

Video Output
12G/3G/1.5G-SDI

MSU-1000 Series

## Rear View



TALLY

DISPLAY

MENU

EXT
I/O

REFERENCE

RCP/MSU

SDI 3

SDI 4

REMOTE

GL/SYNC

SDI 1

SDI 2

SDI
MONI

# Dimensions

Unit: mm (inches)



49.5 (2)

29.2 (1 3/16)

50.8 (2)

89 (3 5/8)

4-M2.6 depth 4.5

10-M4 depth 5

47 (1 7/8)

44 (1 3/4)

26 (1 1/16)

2-3/8" -16UNC depth 10

37 (1 1/2)

60 (2 3/8)

30 (1 3/16)

26.5 (1 1/16)

134 (5 3/8)



207 (8 1/4)

7.5 (5/16)

SONY

54.5 (2 1/4)

140 (5 5/8)

57 (2 1/4)

55 (2 1/4)

4 (3/16)

184 (7 1/4)

# Specificasions

## General

| | |
|---|---|
| Power requirements | TBD |
| Operating temperature | 20°C to +45°C (.4°F to +113°F) |
| Storage temperature | 20°C to +60°C (.4°F to +140°F) |
| Mass | 2.7 kg (5 lb 15 oz) |

## Camera section

| | |
|---|---|
| Imager | 3-chip 2/3-inch type 4K CMOS with global shutter |
| Effective resolution (H x V) | 3840 x 2160 |
| Signal format | 1080/50i, 1080/59.94i, 720/50p, 720/59.94p<br>(1080/23.98PsF, 1080/24PsF, 1080/25PsF, 1080/29.97PsF, 50/59.94p, 4K/50p, 4K/59.94p: option) |
| Spectrum system | F1.4 prism |
| Lens mount | Sony bayonet mount |
| Built-in filters | ND: 1: CLEAR, 2: 1/4ND, 3: 1/8ND, 4: 1/16ND, 5: 1/64ND<br>CC: A: CROSS, B:3200K, C: 4300K, D: 6300K |
| Sensitivity<br>(at 2000 lx, 3200K, 89.9% reflectance) | F10 (at 1080/59.94p, 720/59.94p), F11 (at 1080/50p, 720/50p) |
| Signal-to-noise ratio | -62 dB or higher |
| Horizontal resolution | 2,000 TV lines (at center) |
| Shutter speed | 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 sec (1080/59.94i)<br>1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 sec (1080/50i) |

## Inputs/Outputs

| | |
|---|---|
| Genlock input | BNC (x1)<br>HD: SMPTE 274M, tri-level sync, 0.6 Vp-p, 75 Ω<br>SD: Black burst (NTSC: 0.286 Vp-p, 75 Ω/PAL: 0.3 Vp-p, 75 Ω) |
| SDI 1 output | BNC (x1), 12G/3G/1.5G-SDI |
| SDI 2 output | BNC (x1), 12G/3G/1.5G-SDI |
| SDI 3 output | BNC (x1), 3G/1.5G-SDI |
| SDI 4 output | BNC (x1), 3G/1.5G-SDI |
| SDI MONI | BNC (x1), HD-SDI |
| EXT I/O | D-sub 15-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) | |

Design and specifications are subject to change without notice.

# Optional Accessories

- RM-B170 (Remote Control Unit )
- MSU-1000/MSU-1500 (Master Setup Unit)
- RCP-1000/RCP-1500/RCP-1530 (Remote Control Unit)
- HZC-UHD50(Operating software for 4K/59.94p and 4K/50p)
- HZC-PRV50 (Operating software for 1080/59.94p and 1080/50p)
- HZC-PSF50 (Operating software for 1080/23.98PsF, 24PsF, 25PsF, and 29.97PsF)*

*PsF format will be available in 2019 September