

Blackmagic Design BMD-CINSTUDMFT/G24PDD Studio Camera 4K Plus

Camera Features

Effective Sensor Size

- 17.78mm x 10mm (Four Thirds)

Lens Mount

- Active MFT Mount.

Lens Control

- Iris, focus, zoom on supported lenses.

Dynamic Range

- 13 Stops.

Dual Native ISO

- 0dB and 18dB gain.

Sensitivity at 0dB Gain

- f11 with 2160p59.94.
- f12 with 2160p50.
- at 2,000 lux with 89.9% reflectance.

Signal to Noise Ratio

- 63dB for 2160p.

Shooting Resolutions

- 3840 x 2160 (Ultra HD) up to 60 fps.

Frame Rates

- 23.98, 24, 25, 29.97, 30, 50, 59.94 and 60 frames per second.
- Off-speed frame rates up to 60 fps in Ultra HD.

Focus

- Auto focus available using compatible lenses.

Screen Dimensions

- 7 inch 1920 x 1200

Screen Type

- LCD capacitive touchscreen.

Screen Brightness

- 600 nits

Controls

- Touchscreen camera settings and menus with rotary settings dial, program button, F1, F2 and F3 assignable function buttons, brightness contrast and peaking dials.

Mounting Options

- 2 x 1/4 inch tripod mount.
- 1 x 3/8 inch tripod mount.

Connections

HDMI 2.0 Video Outputs

- 1

Analog Audio Input

- 1 x 3.5mm Stereo Input. Can also be used for Timecode input.

Analog Audio Output

- 1 x 3.5mm mini jack for headphones.

Remote Control

- Remote camera control over HDMI.

Computer Interface

- 2 x USB Type-C 3.1 Gen 1 (up to 5Gb/s) expansion ports for external recording and focus / zoom demand connection. Software updates using USB-C Port A.

Audio

Microphone

- Integrated stereo microphone.

Built in Speaker

- 1 x mono speaker.

Standards

SD Video Standards

- None

HD Video Standards

- 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60

Ultra HD Video Standards

- 2160p23.98, 2160p24, 2160p25, 2160p29.97, 2160p30, 2160p50, 2160p59.94, 2160p60

HDMI Audio Sampling

- Television standard sample rate of 48 kHz and 24-bit.

Media

- 2 x USB-C 3.1 Gen 1 expansion ports for external media for recording Blackmagic RAW.

Media Format

- Can format media to ExFAT (Windows/Mac) or HFS+ (Mac) file systems.

Supported Codecs

Codecs

- Blackmagic RAW Constant Bitrate 3:1,
- Blackmagic RAW Constant Bitrate 5:1,
- Blackmagic RAW Constant Bitrate 8:1,
- Blackmagic RAW Constant Bitrate 12:1,
- Blackmagic RAW Constant Quality Q0,
- Blackmagic RAW Constant Quality Q1,
- Blackmagic RAW Constant Quality Q3,
- Blackmagic RAW Constant Quality Q5

Storage Features

Storage Type

- 2 x USB-C 3.1 Gen 1 expansion ports for external media.

Recording Formats

- Blackmagic RAW 3:1, 5:1, 8:1, 12:1, Q0, Q1, Q3 and Q5 in Ultra HD 3840 x 2160 at the selected frame rate.

Storage Rates

Storage rates based on 30 frames per second.

3840 x 2160 (Ultra HD)

- Blackmagic RAW 3:1 - 127 MB/s

- Blackmagic RAW 5:1 - 77 MB/s
- Blackmagic RAW 8:1 - 48 MB/s
- Blackmagic RAW 12:1 - 32 MB/s
- Blackmagic RAW Q0 - 96 to 190 MB/s
- Blackmagic RAW Q1 - 64 to 153 MB/s
- Blackmagic RAW Q3 - 43 to 109 MB/s
- Blackmagic RAW Q5 - 26 to 64 MB/s

Constant Quality storage rates quoted are indicative only.

Actual storage rates are entirely dependent on image subject matter.

Control

External Control

Blackmagic Zoom Demand and Blackmagic Focus Demand for controlling your camera and lens from tripod handles.

Blackmagic Control Protocol over HDMI for external control when used with a compatible ATEM switcher with ATEM Software Control or ATEM Camera Control Panel. Includes control of some camera settings, focus, iris and zoom with compatible lenses, color corrector, tally and record start and stop to external media via USB expansion port.

Color Corrector

- DaVinci YRGB

Tally

Live Tally Indicator

- 1 x front facing for talent,
- 1 x rear facing for operator.

Software

Software Included

- Blackmagic Camera Setup for Mac and Windows.

Operating Systems

- Mac 10.15 Catalina,
- Mac 11.1 Big Sur or later.
- Windows 10, 64-bit.

Power Requirements

Power Supply

- 1 x External 12V DC 60W power supply.

Power Inputs

- 1 x 12V DC locking 5.5 mm barrel connector.

Power Usage

- 15 - 22 W.

Optional Accessories

- Blackmagic Focus Demand
- Blackmagic Zoom Demand
- ATEM Mini switchers
- ATEM Television Studio HD and HD Pro switchers

Environmental Specifications

Operating Temperature

- 0° to 40° C (32° to 104° F)

Storage Temperature

- -20° to 45° C (-4° to 113° F)

Relative Humidity

- 0% to 90% non-condensing