Blackmagicdesign

Blackmagic URSA Mini Pro 12K

URSA Mini Pro 12K is a revolution in digital film with a 12,288 x 6480 12K Super 35 sensor and 14 stops of dynamic range. The third generation URSA Mini Pro features new color science and shoots 80 megapixels per frame in Blackmagic RAW. You also get built in ND filters, user changeable lens mount and recording to dual CFast or SD cards. URSA Mini Pro 12K even supports recording direct to a flash disk or SSD using its built in SuperSpeed USB-C connection!

$9,995

Camera Features

Effective Sensor Size
27.03mm x 14.25mm (Super35)

Lens Mount
PL mount included. Interchangeable with optional EF and F lens mounts.

Lens Control
12pin broadcast connector for compatible lenses and electronic control via EF mount pins on optional EF lens mount.

Dynamic Range
14 Stops

Shooting Resolutions
12,288 x 6480 (12K DCI)
11,520 x 6480 (12K 16:9)
12,288 x 5112 (12K 2.4:1)
7680 x 6408 (12K Anamorphic)
8192 x 4320 (8K DCI)
7680 x 4320 (8K 16:9)
8192 x 3408 (8K 2.4:1)
5120 x 4272 (8K Anamorphic)
6144 x 3240 (6K Super16)
4096 x 2160 (4K Super16)
4096 x 2160 (4K DCI)
3840 x 2160 (4K 16:9)
4096 x 1704 (4K 2.4:1)
2560 x 2136 (4K Anamorphic)

Frame Rates
Maximum sensor frame rate dependent on resolution selected. Project frame rates of 23.98, 24, 25, 29.97, 30, 50, 59.94 and 60 fps supported.

High Speed Frame Rates
12K 17:9 full sensor up to 60 fps
8K DCI full sensor up to 110 fps
4K DCI full sensor up to 110 fps
8K 2.4:1 and 4K 2.4:1 up to 140 fps
6K Super 16 up to 120 fps
4K Super 16 up to 220 fps

Built in ND Filters
Four position ND filter wheel with clear, 2-stop, 4-stop and 6-stop IR ND filters.

Focus
Focus button turns on peaking, auto focus available using compatible lenses.

Iris Control
Iris wheel and touchscreen slider for manual iris adjustment on electronically controllable lenses, iris button for instant auto iris settings on compatible lenses so no pixel is clipped in film mode. Scene average auto exposure in video mode.
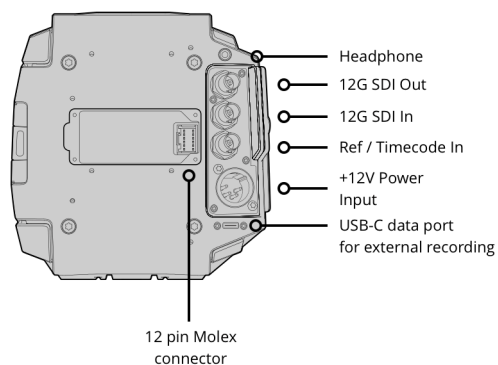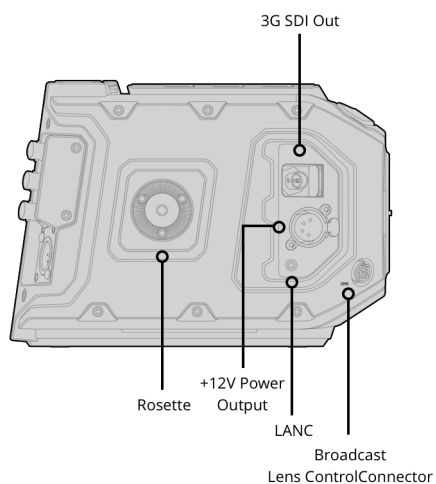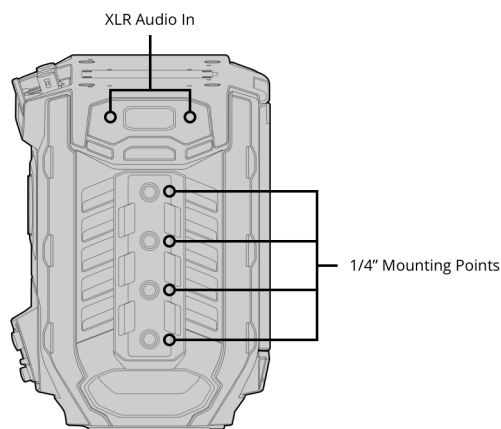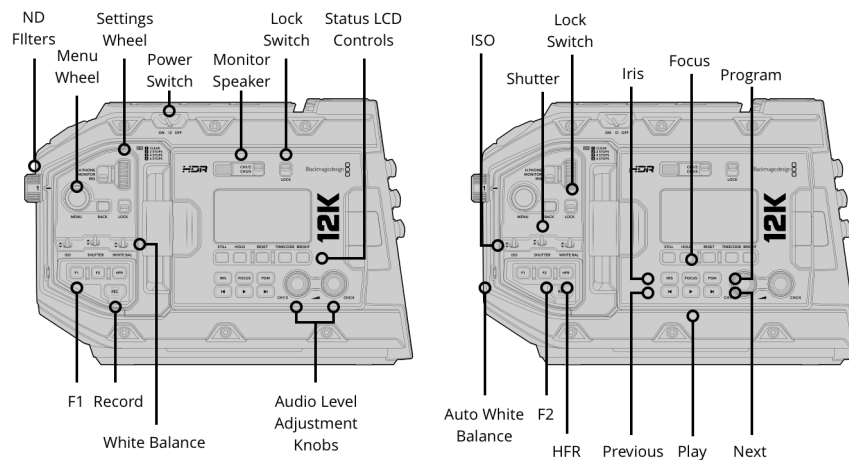
Screen Dimensions
4 inch

Screen Type

LCD capacitive touchscreen.

Metadata Support

Automatically populated lens data from i/Technology with compatible PL lenses and electronic EF lenses when using optional EF lens mount. Automatic recording of camera settings and slate data such as project, scene number, take and special notes.

Controls

Touchscreen menus on 4 inch screen. Push buttons for other controls. 3 assignable shortcut keys.

Timecode Clock

Highly accurate timecode clock. Less than 1 frame drift every 8 hours.

Connections

Total Video Inputs

1 x 12G-SDI

Total Video Outputs

1 x 12G-SDI, 1 x 3G-SDI Monitoring.

SDI Rates

1.5G, 3G, 6G, 12G.

Analog Audio Inputs

2 x XLR analog switchable between mic, line and AES audio. Phantom power support.

Analog Audio Outputs

1 x 3.5mm headphone jack, supports iPhone microphone for talkback.

Reference Inputs

Tri-Sync/Black Burst/Timecode.

Remote Control

1 x 2.5mm LANC input for Rec Start/Stop, plus Iris and Focus control using compatible lenses.

Computer Interface

1 x USB Type-C 3.1 Gen 2 with power delivery for external drive recording. 1 x USB Type-C for software updates.

ND
FIlters
Settings
Wheel
Menu
Wheel
Power
Switch
Monitor
Speaker
Lock
Switch
Status LCD
Controls

ISO
Shutter
Lock
Switch
Iris
Focus
Program

F1   Record
White Balance
Audio Level
Adjustment
Knobs

Auto White
Balance
F2
HFR   Previous   Play   Next

XLR Audio In

1/4" Mounting Points

3G SDI Out

Rosette
+12V Power
Output
LANC
Broadcast
Lens ControlConnector

Headphone
12G SDI Out
12G SDI In
Ref / Timecode In
+12V Power
Input
USB-C data port
for external recording

12 pin Molex
connector

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, 1080i50, 1080i59.94, 1080i60

Ultra HD Video Standards
2160p23.98, 2160p24, 2160p25, 2160p29.97, 2160p30, 2160p50, 2160p59.94, 2160p60

SDI Compliance
SMPTE 292M, SMPTE 424 Level B, SMPTE 2081-1, SMPTE 2082-1

SDI Audio Sampling
48 kHz and 24 bit

Media

Media
2 x CFast 2.0 card slots, 2 x SD UHS-II card slots, 1 x USB-C 3.1 Gen 2 expansion port with power delivery for recording to external media. Please refer to either the Manual or the Information Note at www.blackmagicdesign.com/support for compatible media.

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

Supported Codecs

Codecs
Blackmagic RAW Constant Bitrate 5:1,
Blackmagic RAW Constant Bitrate 8:1,
Blackmagic RAW Constant Bitrate 12:1,
Blackmagic RAW Constant Bitrate 18:1,
Blackmagic RAW Constant Quality Q0,
Blackmagic RAW Constant Quality Q1,
Blackmagic RAW Constant Quality Q3,
Blackmagic RAW Constant Quality Q5.

Control

External Control
Blackmagic SDI Camera Control Protocol, iPad control, Bluetooth control, 1 x 2.5mm LANC for lens and record control.

Talkback and Tally

Talkback
SDI Channels 15/16 and
iPhone headset.

Live Tally Indicator
Tally on LCD, URSA Viewfinder and
URSA Studio Viewfinder.

Storage Features

Storage Type
2 x CFast 2.0
2 x SD UHS-II cards
1 x high speed USB-C expansion port
for external media.

Storage Rates

Storage rates based on 24 frames per second.

12K - 12,288 x 6480
Blackmagic RAW 5:1 - 578 MB/s
Blackmagic RAW 8:1 - 361 MB/s
Blackmagic RAW 12:1 - 241 MB/s
Blackmagic RAW 18:1 - 160 MB/s
Blackmagic RAW Q0 - 241 to 578 MB/s [1]
Blackmagic RAW Q1 - 144 to 361 MB/s [2]
Blackmagic RAW Q3 - 96 to 241 MB/s [3]
Blackmagic RAW Q5 - 72 to 180 MB/s [4]

8K - 8192 x 4320
Blackmagic RAW 5:1 - 258 MB/s
Blackmagic RAW 8:1 - 161 MB/s
Blackmagic RAW 12:1 - 107 MB/s
Blackmagic RAW 18:1 - 72 MB/s
Blackmagic RAW Q0 - 107 to 258 MB/s [1]
Blackmagic RAW Q1 - 64 to 161 MB/s [2]
Blackmagic RAW Q3 - 43 to 107 MB/s [3]
Blackmagic RAW Q5 - 32 to 81 MB/s [4]

6K - 6144 x 3240
Blackmagic RAW 5:1 - 145 MB/s
Blackmagic RAW 8:1 - 91 MB/s
Blackmagic RAW 12:1 - 61 MB/s
Blackmagic RAW 18:1 - 40 MB/s
Blackmagic RAW Q0 - 61 to 145 MB/s [1]
Blackmagic RAW Q1 - 36 to 91 MB/s [2]
Blackmagic RAW Q3 - 24 to 61 MB/s [3]
Blackmagic RAW Q5 - 18 to 45 MB/s [4]

4K - 4096 x 2160
Blackmagic RAW 5:1 - 65 MB/s
Blackmagic RAW 8:1 - 41 MB/s
Blackmagic RAW 12:1 - 27 MB/s
Blackmagic RAW 18:1 - 18 MB/s
Blackmagic RAW Q0 - 27 to 65 MB/s [1]
Blackmagic RAW Q1 - 16 to 41 MB/s [2]
Blackmagic RAW Q3 - 11 to 27 MB/s [3]
Blackmagic RAW Q5 - 8 to 20 MB/s [4]

Recording Formats

Blackmagic RAW Q0, Q1, Q3, Q5, 5:1, 8:1, 12:1 and 18:1 at 12,288 x 6480, 11,520 x 6480, 12,288 x 5112, 7680 x 6408, 8192 x 4320, 7680 x 4320, 8192 x 3408, 5120 x 4272, 6144 x 3240, 4096 x 2160, 3840 x 2160, 4096 x 1704 and 2560 x 2136 stored as 12 bit non-linear with film, extended video, video or custom 3D LUT embedded in metadata.
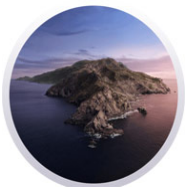
[1] Constant Quality setting Q0 storage rates quoted are indicative only, based on a 5:1 - 12:1 compression range.

[2] Constant Quality setting Q1 storage rates quoted are indicative only, based on a 8:1 - 20:1 compression range.

[3] Constant Quality setting Q3 storage rates quoted are indicative only, based on a 12:1 - 30:1 compression range.

[4] Constant Quality setting Q5 storage rates quoted are indicative only, based on a 16:1 - 40:1 compression range. Actual storage rates are entirely dependent on image subject matter.

Software

Software Included
URSA Mini Operating System
DaVinci Resolve Studio for Mac and Windows including activation key
Blackmagic Camera Setup
Blackmagic RAW Player
Blackmagic RAW QuickLook Plugin
Blackmagic RAW SDK
Blackmagic RAW Speed Test

Operating Systems

Mac 10.14 Mojave,
Mac 10.15 Catalina or later.

Windows 10.

Power Requirements

Power Supply
1 x External 12V power supply. 12 pin Molex connector for rear battery plate.

External Power Input
1 x 4 pin XLR port for external power or battery use.
1 x 12 pin Molex connector on rear battery plate.
Custom V-mount battery plate with D-tap +12V regulated output from camera.

Power
Rear camera mount compatible with industry standard V-mount or gold mount battery plates.

Accessories

Optional Accessories

URSA Mini Pro PL, EF and F Mounts
URSA Mini Pro Shim Kit
URSA Mini Shoulder Kit including top handle and extender arm
URSA Viewfinder
URSA Studio Viewfinder
URSA Mini Recorder
URSA VLock Battery Plate
URSA Gold Battery Plate
URSA Mini Mic Mount
URSA Mini Top Handle
URSA Handgrip
Blackmagic Camera Fiber Converter

Physical Specifications

5.92 in

9.2 in

5.78 in

LB
5.62 lb

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

What's Included

Blackmagic URSA Mini Pro 12K Body
Turret dust cap
PL lens mount
Power supply
DaVinci Resolve Studio activation key

Warranty

12 Month Limited
Manufacturer's Warranty.

Blackmagic Design Authorized Reseller