

# LDX 110 & LDX C110

## Introducing a Top-quality, Entry-level Broadcast Camera



A new entry-level broadcast camera that perfectly answers the need for top-quality video performance in live sports and entertainment productions.

While the demand for high-quality, engaging live content has never been higher, production budgets have not increased accordingly. To meet the need for cost-effective yet high-quality video production across various formats — ranging from HD to UHD, single-speed to 3x speed, and SDR to HDR — a new generation of cameras has emerged. These cameras leverage the latest

2/3" native UHD CMOS imagers with global shutter operation, all in a single-imager configuration. This design strikes the perfect balance between image performance and cost across numerous applications.

As the newest entry-level addition to our LDX® 100 Series, this camera benefits from many of the unique features found in our top-of-the-

line models, such as NFC support, integrated HDR/SDR LUT processing, daily options, and creative grading solutions, all in a more cost-efficient package. Models in this series include the LDX 110 and LDX C110.

### Key Features

- UHD camera for live sports and entertainment
- Native UHD Global Shutter Imager
- Part of the LDX 100 camera series
- XCU connectivity for SDI connectivity
- LUT processing from the head
- DirectIP via XCU (base station)
- IP trunk available
- NFC + GPS support
- Supports SMPTE ST 2110 standard as well as AMWA NMOS via the XCU (base station)
- Compact camera supports the same feature set as the full size version. Including Fiber link to the XCU (base station)

## SPECIFICATIONS — LDX 110 & C110 CAMERA HEADS

### General

#### LDX 110

- **Temperature range:** -20° to +45°C (-4° to 113°F)
- **Storage temperature:** -25°C/+60°C (-13° to 140°F)
- **Weight:** approx. 5.3 kg (11.7 lbs.)
- **Dimensions (LxWxH):** 380 x 167 x 253 mm (15.66 x 6.56 x 9.93 in.)
- **Power consumption (typ.):** 72W

#### LDX C110

- **Temperature range:** -20° to +45°C (-4° to 113°F)
- **Storage temperature:** -25°C/+60°C (-13° to 140°F)
- **Weight:** approx. 2.6 kg (5.7 lbs.)
- **Dimensions (LxWxH):** 225 x 120 x 140 mm (8.86 x 4.72 x 5.51 in.)
- **Power consumption (typ.):** 56W

### Camera

**Pick-up device:** 2/3" UHD Xenios CMOS imager with global shutter

**Smear:** no vertical smear

**Effective picture elements:** 3840 x 2160 (H x V)

**Optical system:** F1.4 system

**Lens mount:** 2/3" (B4 type) Bayonet lens mount

**Optical filter wheels:** 2x motorized wheels

**Optical filters on first wheel:** clear, 1/4 ND, 1/16 ND, 1/64 ND, Cap

**Optical filters on second wheel:** clear, 4P-star, OLP, 1/2 ND, Cap

**Electronic color correction:** 3200°K, 5600°K, 7500°K, FL, 2 AWB presets, variable, continuous auto white

**Video modes:** HD 1080: 59.94i, 50i\*

Filmic modes, UHD, high speed, become available when options are introduced later 2025

**Sensitivity @2000 lux (typical) + S/N ratio:** F11 @ 62 dB S/N

**Aspect ratio:** 16:9

**Digital resolution:** 16-bit A/D-conversion with 34-bit processing in RGB

**Gain selection:** -6 dB to +18 dB in 3 dB steps (user-definable presets) or continuous master gain

### Connectivity

**Microphone input (front):** XLR-3 female, balanced, with switchable +48V phantom power (not applicable for the LDX C110)

**REF/AES BNC connector:** Reference input, output or AES digital audio

**BNC A, B, D connectors:** 2x 12G/6G/3G/1.5G SDI out, 1x 3G/1.5G SDI in/out

**Camera control network (C2IP):** RJ-45 Ethernet connector (1 Gb/s)

**Ethernet/IP Trunk:** RJ-45 Ethernet connector (1 Gb/s)

**Lens connector:** 12p Hirose connector

**Viewfinder connector:** 9p Fischer MiniMax connector (not applicable for the LDX C110)

**Hybrid Fiber connector:**

- LDX 110: SMPTE ST 304 hybrid fiber connector (swiveling)
- LDX C110: Neutric opticalCON Duo hybrid fiber connector

**Mounting holes:**

- LDX 110: 2x 1/4" - 20 UNC + 3x M4 threaded holes (camera thread)
- LDX C110:  
On top: 2x 3/8" - 16 UNC, 6x 1/4" - 20 UNC, 10x M4  
At bottom: 2x 3/8" - 16 UNC, 4x 1/4" - 20 UNC

**Audio inputs (rear):** 2x XLR-3 female, balanced, with switchable +48 V phantom power (not applicable for LDX C110)

**Intercom:** XLR-5 with Engineering, Production and Program channels (not applicable for LDX C110)

**DC Power input:**

- LDX 110/C110: 12V (12 to 17V), XLR-4 male <16A
- LDX C110: OpticalCON DUO SMPTE power: 20V to 28V DC <6A

**DC Power output:** 13V, XLR-4 female < 4A DC (not applicable for LDX C110)

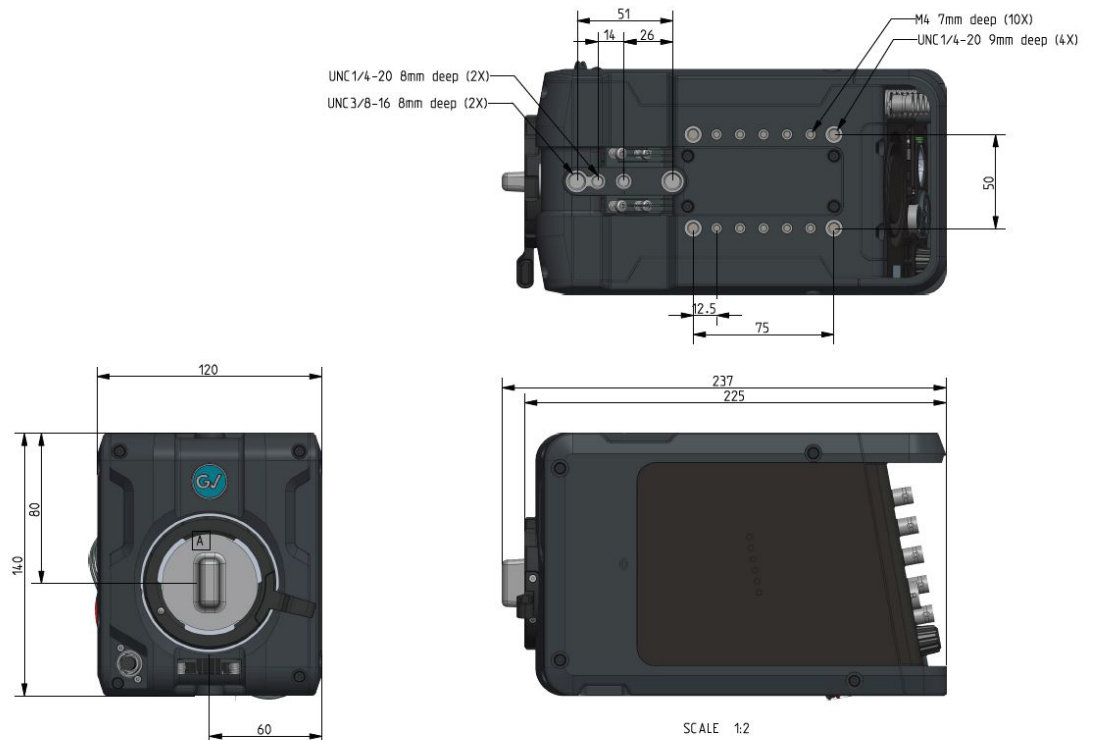
### Accessories

2" LCD viewfinder

7" LCD viewfinder

Reflex SXP

\* Available at first deliveries



## SPECIFICATIONS – XF TRANSMISSION

### XCU Xpress UXF

#### Video (specific format support depends on the camera model)

720p: 50/59.94/150/179.82/300/359.64 Hz

1080i: 50/59.94/150/179.82/300/359.64 Hz

1080p: 50/59.94/150/179.82 Hz

4K UHD: 3840x2160p50/59.94

#### Compatible Cameras

LDX 80 Series, LDX 90 Series and LDX 100 Series

#### General (incl. cradle)

Dimensions XCU + cradle (HxWxL, approx.): 448 x 86.5 x 533 mm (19" rack, 2 RU) (17.6 x 3.4 x 21.0 in.)

Operating temperature: 0 to +45°C (+32 to +113°F)

Storage temperature: -20 to +70°C (-4 to +158°F)

Operation humidity: Max. 90% (noncondensing)

Shock resistance: Max. 10G (transport), max. 2G (operating)

Altitude: Max. 15,420m (50,000 ft.)

#### Weight:

XCU + cradle: 12.5 kg (27.6 lbs.)

XCU: 7.8 kg (17.2 lbs.)

Power requirement: AC 100V/240V, 47 to 63 Hz

Power connector: IEC type, 3-pin male

Power consumption: Total power (Camera + XCU) 450W max.

#### Connectors (4K mode)

Teleprompter in: BNC 1x (loop-through output), (C) VBS, 1.0 Vp-p, 75Ω

Reference in: 1x (loop-through output), 1.0 Vp-p, 75Ω HD tri-level sync or SD blackburst

4K UHD: 2x / 3G HD-SDI: 4x, BNC 0.8 Vp-p, 75Ω Quad or 2SI, Level-A

HD-SDI out: BNC 1x 0.8 Vp-p, 75Ω, SMPTE ST 292, 1080i/720p at 50/59.94 Hz or SMPTE ST 425A, 425B, 1080p at 50/59.94 Hz

Signaling in/out: D-sub 15-pin – male, preview, green tally (call – dry contact), yellow tally (iso – dry contact), red tally (on air – dry contact), remote audio level control (22-64 dB), DC

Auxiliary in/out: D-sub 9-pin – female, private data in/out – 100 kb TTL (RS-232)

Control data: RJ-45 connector for C2IP (camera control)

Control data: RJ-45 connector for IP trunk up to 1 GbE

Hybrid fiber connector: LEMO hybrid acc. SMPTE ST 304

External video in: 3x HD-SDI (1.5 Gb/3.0 Gb) or SD-SDI 0.8 Vp-p, 75Ω

Input 1 (loop-through output)

Inputs 2 and 3 (no loop-through output)

#### Connectors (HD/3G 1X/3X/6X modes)

Teleprompter in: BNC 1x (loop-through output), (C) VBS, 1.0 Vp-p, 75Ω

Reference in: 1x (loop-through output), 1.0 Vp-p, 75Ω HD tri-level sync or SD blackburst

HD-SDI out\*: BNC 6x 0.8 Vp-p, 75Ω, SMPTE ST 292, 1080i/720p at 50/59.94 Hz

HD-SDI out (live/effect)\*: BNC 2x 0.8 Vp-p, 75Ω, SMPTE ST 292, 1080i/720p at 50/59.94 Hz

HD-SDI monitoring out: BNC 1x 0.8 Vp-p, 75Ω, SMPTE ST 292, 1080i/720p at 50/59.94 Hz

SD-SDI out: BNC 2x 0.8 Vp-p, 75Ω, SMPTE ST 259 ITU-R, BT.601

SD-SDI monitoring out: BNC 1x 0.8 Vp-p, 75Ω, SMPTE ST 259 ITU-R, BT.601

Composite video monitoring output: BNC 1x 1.0 Vp-p, 75Ω (CVBS text with video, for viewing purposes)

Signaling in/out: D-sub 15-pin – male, preview, green tally (call – dry contact), yellow tally (iso – dry contact), red tally (on air – dry contact), remote audio level control (22-64 dB), DC

Auxiliary in/out: D-sub 9-pin – female, private data in/out – 100 kb TTL (RS-232)

Control data: RJ-45 connector for C2IP (camera control)

Control data: RJ-45 connector for IP trunk up to 1 GbE

Hybrid fiber connector: LEMO hybrid acc. SMPTE ST 304

External video in: 3x HD-SDI (1.5 Gb/3.0 Gb) or SD-SDI 0.8 Vp-p, 75Ω

Input 1 (loop-through output)

Inputs 2 and 3 (no loop-through output)

\* Notes:

– 8x 1.5G video outputs (in 1X speed 720p, 1080i)

– 6x 3G and 2x 1.5G video outputs (in 1X speed 1080p)

– 2x three phases on 6x 1.5G and 2x 1.5G live (in 3X speed 720p, 1080i)

– 2x three phases on 6x 3G and 2x 6G live (in 3X speed 1080p)

– 2x six phases on 6x 3G (dual-link) and 2x 1.5G live (in 6X speed 720p, 1080i, 1080p)

– During single-speed HDR operation, some of the signals will be with SDR mapping and some of the signals will be with HDR mapping

|   |                     | XCU Xpress UXF | XCU Xpress UXF + IP option |
|---|---------------------|----------------|----------------------------|
| Full Baseband connectivity                            |                     | Y              | Y                          |
| Full IP connectivity                                  |                     | N              | Y                          |
| 12G SDI support                                       |                     | Y              | Y                          |
| HD/3G/4K UHD support in single speed                  |                     | Y              | Y                          |
| High speed support                                    | 3X HD, 6X HD, 3X 3G | Y              | Y                          |
|   | 6X 3G               | Y              | Y*                         |
| DirectIP(+) support                                   |                     | Y              | Y                          |
| HDR support   | in single speed     | Y              | Y                          |
|   | in high speed       | Y              | Y                          |
| Simultaneous outputs in: 4K HDR, 3G/HD HDR, 3G/HD SDR |                     | Y              | Y                          |
| LDX 100 series support                                |                     | Y              | Y                          |
| Delivered with UXF cradle with 4x SFP+ slots          |                     | Y              | Y                          |

\* 6x 3G not supported over IP

## TECHNICAL SPECIFICATIONS — XF TRANSMISSION (cont.)

### Signaling and Control

Signaling in/out: D-sub 15-pin, male; preview, green tally (call), dry contact; yellow tally (iso), dry contact; red tally (on air), dry contact; remote audio level control (22-64 dB), DC

Auxiliary in/out: D-sub 9-pin, female; private data in/out; 100 kb TTL (RS-232)

Control data: RJ-45 connector for C2IP (camera control)

### Audio

2-ch. audio: Audio out, XLR-3 2x ; 0/+6 dBu ( $\pm 1.5$  dB, max. 18 dBu, 600 $\Omega$ , gain max. 70 dB)

Frequency response: 40 Hz to 15 Hz, (+1/-3 dB, 1 kHz, -10 dBu output level)

Distortion: Less than 0.5% (100 Hz/1 kHz, +6 dBu out, 600 $\Omega$ ) S/N ratio: 58 dB (unweighted RMS)

AES-EBU 1+2: BNC 75 $\Omega$ , Dig audio output Audio 1 and 2

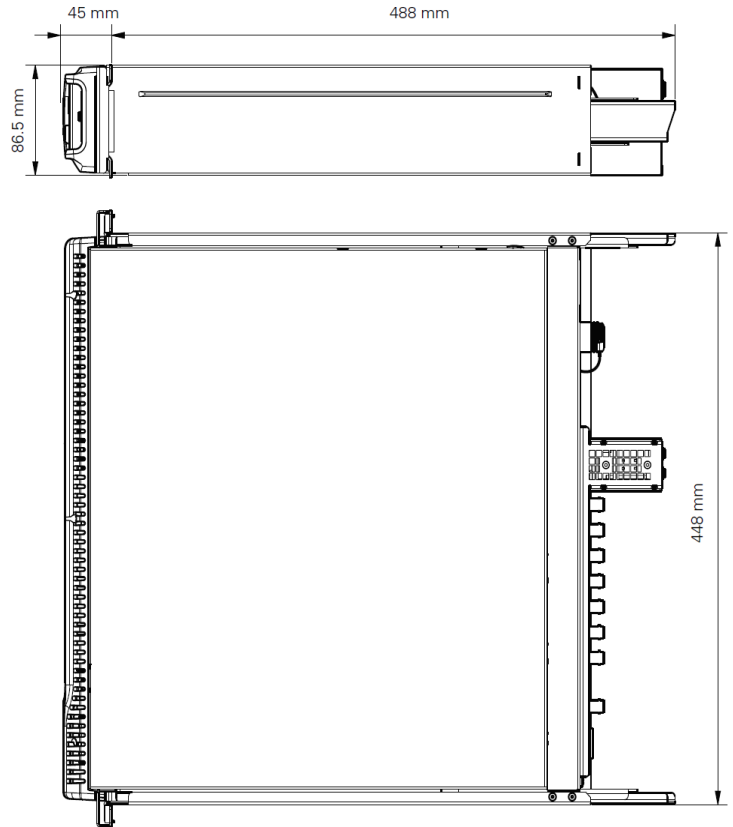
AES-EBU 3+4: BNC 75 $\Omega$ , Dig audio output Audio 3 and 4

Intercom in/out (2/4-wire intercom): D-sub 15-pin, female (program in, production in/out, engineering in/out), in: 0 or 6 dBu; out: 0 or 6 dBu ( $\pm 2$  dB, max. 12 dBu)

Frequency response: 150 Hz to 6 kHz (1 kHz, -10 dBu output level)

Distortion: Less than 2% (1 kHz, +12 dBu level)

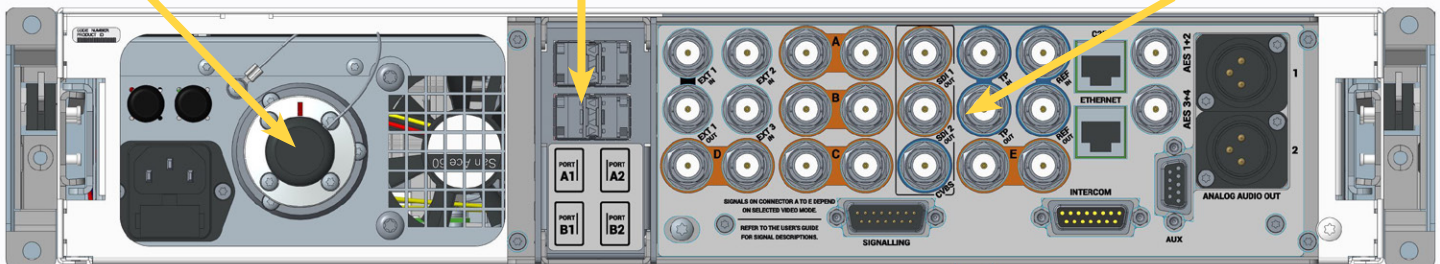
### Dimensions for all XCU UXF models



SMPTE hybrid fiber connection for cameras

4x SFP+ connections (optional 12G SDI SFPs can be used in addition to the IP SFPs)

All the traditional baseband connectivity from regular XCUs while transitioning to IP



|                      |          |  | XCU UXF series                   |
|----------------------|----------|--|----------------------------------|
| IP connectivity      | QSFP     | 100G   | –                                |
|                      | SFP+     | 25G (inc. bidirectional)                         | –                                |
|                      | SFP+     | 10G (inc. bidirectional)                         | 4x (Redundancy)                  |
| Camera Control       | C2IP     | In-band (vlan) / out-band                        | no / yes (via RJ45)              |
|                      | XML      | XML-camera control                               | yes (via CCS-one)                |
| SMPTE ST 2110 -10    | PTP      | 1-step / 2-step (inc. redundancy)                | yes / yes                        |
|                      |          | SMPTE ST 2059-2 / Media profile / AES R16 / user | yes / yes / yes / yes            |
| SMPTE ST 2110 -20/21 | Video    | Multicast, type N                                | yes                              |
| SMPTE ST 2110 -22    | Video    | JPEG-XS, Multicast, type N                       | no                               |
| SMPTE ST 2110 -30    | Audio    | Level A / B / C                                  | yes / yes / no*                  |
| SMPTE ST 2110 -30    | Intercom | Level A / B / C                                  | yes / yes / no*                  |
| SMPTE ST 2022-6      | Video    |  | yes                              |
| H.264                | Video    | Proxy  | no                               |
| NMOS                 | IS-04    | Static / mDNS / DNS-SD (over C2IP)               | yes / yes / yes                  |
| NMOS                 | IS-04    | Static / mDNS / DNS-SD (over Media: redundant)   | yes / yes / yes (port A1 and B1) |
| NMOS                 | IS-04    | Version  | V1.0 / V1.1 / V1.2 / V1.3        |
|                      | IS-05    | Over C2IP/Media(redundant)                       | yes / yes                        |
|                      | IS-05    | Version  | V1.0 / V1.1                      |
|                      | IS-07    | MQTT / Websockets                                | MQTT / no Websockets             |
|                      | IS-07    | MQTT over C2IP / MQTT over media (Not Redundant) | yes / yes                        |
|                      | IS-09    | mDNS / DNS-SD (C2IP + Media)                     | yes / yes                        |
| LLDP                 |          |  | yes                              |
| IGMP V2 / V3         |          |  | yes / yes                        |
| DHCP                 |          | Over C2IP/Media                                  | yes / yes                        |
| DNS                  |          | Only in combination with DHCP                    | yes                              |
| SDP                  |          | Import*** / Export                               | yes / yes                        |
| IP-Trunk             | Access   | Up to 1 Gb                                       | yes                              |
| IP-Trunk             | VLAN     | Multiple VLANs                                   | yes                              |
| Redundancy           | 2022-7   | Video / Audio / Intercom / PTP                   | yes / yes / yes / yes**          |
| Redundant Control    |          | Control (C2IP) / NMOS                            | no / yes                         |

\* 1, 2, 4, 8, 16 channels selectable; only 48 kHz support; packet times 1 ms, 250 µs, 125 µs

\*\* Fail-over is implemented for return video, return audio, return intercom and IP-trunk

\*\*\* Import only via IS-05



## Ordering

### Camera Head and Accessories

#### LDX 110

LDX 110 camera head

#### LDX C110

LDX C110 Compact camera head

#### EC 2-100

2-inch Ocular Viewfinder for LDX 100 series

#### VF 8-100-H

7-inch native HD VF for LDX 100 series

#### LDK 4475/15

Reflex SuperXpander Large Lens Adapter

### Power Supply Options

#### HPE-300-2AC

Hybrid power extender, 300W, dual AC input with auto-failover. UFP required

#### 15 VDC power supply LDX 100 Series

### Options

- 1080p 50/59.94 option for LDX 100 series
- HDR (PQ, HLG, S-Log3) option for LDX 100 series
- UHD 50/59.94 option for LDX 100 series
- 3-speed HD option for LDX 100 series
- DirectIP/IP+ option for LDX 100 series
- HD Filmic modes for LDX 100 series
- UHD Filmic modes for LDX 100 series
- Perpetual GPS Option for LDX 100 Series

### Camera Control

#### CGP

Creative Grading Control Panel

#### CCS One

Camera Control Server

#### CGA

Creative Grading App



## A la carte Temporary Software Options

The LDX 100 series allows you to upgrade feature by feature, perpetually or just for one day using an à la carte model. Daily (or multiple days) options can be created in the customer's secured B.O.W.L. web portal. A section dedicated to the LDX 100 series has been added to the portal.

### Opt-1080p-4-LDX 100

Perpetual 1080p option for LDX 100 series

### Opt-HDR-4-LDX 100

Perpetual HDR option for LDX 100 series

### Opt-UHD-4-LDX 100\*

Perpetual UHD 50/59.94 option for LDX 100 series

### Opt-HD 3-speed-4-LDX 100\*

Perpetual 3-speed HD option for LDX 100 series

### Opt-DirectIP-4-LDX 100

Perpetual DirectIP/DirectIP+ option for LDX 100 series

### 50CredPoint-4-LDX 100

Bundle of 50 LDX 100 series Option Credit Points

### 500CredPoint-4-LDX 100

Bundle of 500 LDX 100 series Option Credit Points

### 1000CredPoint-4-LDX 100

Bundle of 1000 LDX 100 series Option Credit Points

### GPS Option Perpetual

This unique feature indicates the exact location of the camera as soon as it is connected to the network and Creative Grading system – both graphically on a map and with the coordinates displayed in the Creative Grading App. Ideal for large scale and remote operations. This option is only available as a perpetual option.

### UHD Filmic Modes Perpetual\*

Enables UHD "filmic" acquisition, in broadcast frame rates (25/29.97) and cinema frame rates (23.98/24/60). (For the UHD Filmic option the UHD 50/59.4 Option, 9-0110000105-9, is required.) The UHD Filmic option is also available as a daily option in the B.O.W.L. portal.

Any available option can easily be created in the LDX 100 section of the B.O.W.L. web portal against Option Credit Points.

\* Filmic modes, UHD, high speed, become available when options are introduced later 2025.

|             |                      | Model        | Options        |   |        |
|-------------|----------------------|--------------|----------------|---|--------|
| Requirement | Details              | LDX 110/C100 | Item Number    | Commercial Reference  | Points |
| 1080i       | 50, 59.94            | ✓            |                |   |        |
| 1080PsF     | 23.98, 24, 24, 29.97 | *            | 9-0110000103-9 | HD Filmic – Broadcast (25/29.97) Cinema (23.98/24/60)                         | 1      |
| 1080p       | 50, 59.94            | ○            | 9-0110000140-9 | Perpetual 1080p option for LDX 100 series                                     | 2      |
| 4K UHD      | 23.98, 24, 25, 29.97 | *            | 9-0110000108-9 | Perpetual UHD Filmic Option for LDX 100 Series – Requires UHD 50/59.94 option | 2      |
| 4K UHD      | 50, 59.94            | *            | 9-0110000105-9 | Perpetual UHD 50/59.94 option for LDX 100 Series                              | 4      |
| 3x Speed    | HD                   | *            | 9-0110000101-9 | Perpetual 3-speed HD option for LDX 100 Series                                | 6      |
| GPS         | For NativeIP         | ○            | 9-0110000112-9 | Perpetual GPS option for LDX 100 Series                                       | N/A    |
| DirectIP(+) | For XF transmission  | ○            | 9-0110000111-9 | Perpetual DirectIP/DirectIP+ option for LDX 100 Series                        | 3      |
| HDR         | PQ, HLG, S-Log3      | ○            | 9-0110000139-9 | Perpetual HDR option for LDX 100 series                                       | 2      |
| WCG         | BT.2020              | ✓            |                |   |        |

✓ Standard

○ Optional

\* Future

# RefleX SuperXpander

The **RefleX SuperXpander** is the perfect match for LDX cameras using the unique 3G Transmission system or XF Fiber Transmission system and turns a comfortable shoulder camera quickly and easily into a full-featured studio camera.

Grass Valley broadcast products offer production professionals the most comprehensive multiformat solutions for acquisition, production, storage and playback, as well as a strong foundation for centralized, proactive status and activity monitoring. The Grass Valley RefleX SuperXpander is such a solution. Compatible with the latest 3G Transmission family and the XF Fiber Transmission system, it supports box-type lenses, teleprompters and high-resolution viewfinders.

For sports and events coverage, the use of large zoom lenses is a common requirement. The RefleX SuperXpander acts as a large lens adapter, rapidly converting a portable camera into a full-featured studio camera.

The lightweight RefleX SuperXpander provides secure mounting and balancing for the largest prompter monitors. For increased simplicity, the camera can remain mounted inside the RefleX SuperXpander housing for transport, saving rigging time and precious space, while ensuring that the camera is aligned and ready to go immediately. Alternatively, the camera can be mounted or released from the housing quickly so it can be switched between pedestal, box lens and handheld applications working with an ENG style lens — even during a live program.

The RefleX SuperXpander can be used with all Grass Valley viewfinders, providing an unprecedented degree of freedom. The unique design of the RefleX SuperXpander system puts even a large viewfinder close to the optical axis of the camera, making camera

movements and positioning more intuitive for the operator to ensure that the shot is right every time.

The new hot shoe connector between the camera and the RefleX SuperXpander provides all power and signal connectivity — making it quick, convenient and reliable, with no need for extra cabling. The hot shoe connector also makes the RefleX SuperXpander transmission system-agnostic — 3G Fiber, 3G Triax and XF Fiber camera systems can be used with the same SuperXpander without the need of switching modules.

For operator convenience, the RefleX SuperXpander is equipped with a functional control panel placed at the rear of the camera. All camera functions can be selected through this panel with its intuitive button layout, with three of the buttons assignable by the operator. These buttons have a sophisticated backlight to improve readability in all lighting conditions and to indicate the status of the buttons.

Two utility power connectors are provided to drive external equipment. Each connector (XLR-4 female) is rated at 13.8V/8 amps. or 120W maximum (combined).



RefleX SuperXpander – Fast and Easy Docking

## Key Features

- Supports LDX cameras
- Transmission system-agnostic
- Supports 3G Transmission and XF Fiber Transmission products
- Improved rapid mounting of camera and box lens
- Direct connection of viewfinder to the camera
- Rock-solid configuration for all sizes of large lenses
- Convenient camera control panel at the rear
- Three assignable control buttons
- Mounting and balancing available for all prompter monitors
- Two fixed utility output connectors: 13.8V@8A each or 120W max. (combined)

## Specifications

- Dimensions (L x W x H): 526 x 287 x 347 mm (20.7 x 11.3 x 13.7 in.)
- Weight (approx.): 8.5 kg (18.7 lbs.)
- Operating temperatures: -20°C to +45°C (-4°F to +113°F)
- Storage temperatures: -20°C to +60°C (-4°F to +140°F)
- Power supply: supplied by the base station
- Power consumption: 250 VA max. fully equipped (supplied by the base station)
- Utility power outputs: 2x 13.8 VDC XLR-4 female connector, 120 W max. (combined)
- Lens interface: 36-pin Centronics female connector





# EYECATCHER EC 2-100 Viewfinder



The eyes are the most important tools used during a production. Every detail of a shot is important—and the operator must be able to rely on what they are seeing. The **EyeCatcher EC 2-100** color ocular viewfinder provides users with the confidence to know what they see is what is also being seen in the control room and by viewers.

The Grass Valley EyeCatcher EC 2-100 is a high performance color LCD ocular viewfinder for the LDX camera heads. It is part of a full line of state-of-the-art color viewfinders and is very feature-rich with an intuitive user interface. The EyeCatcher viewfinder also has a stylish look and compact design.

EyeCatcher EC 2-100 offers the best possible image performance, high-speed response time, QHD resolution of 960x540 pixels and a diagonal size of 5.1 cm (2.0 in.). The controls are easy and flexible, similar to the Grass Valley 7-inch and 7.4-inch color LCD viewfinders. It comes with two (task) assignable user buttons and a -3 to +1 diopter compensation range.

## Key Features

- Stylish look and compact design
- Offers the best possible image performance:
  - High resolution
  - Fast response
- High brightness and contrast ratio
- Ergonomic design for comfortable shooting
- Easy and flexible to use
- Intuitive viewfinder menu
- Camera menu easily accessible via viewfinder controls
- Brightness, contrast and peaking adjustment with rotary controls
- Color/monochrome picture switchable
- Tally on-low-off switch
- Operator-only tally indicator
- Underscan mode for full picture visibility off shoulder
- 2 (task) assignable buttons
- Adjustable diopter

## Specifications

### Connectors

**Camera connector:** Future proof 9-pin Fisher connector

### Controls

2 assignable user buttons  
Brightness rotary control  
Contrast rotary control  
Combined menu/Peaking rotary control

### Indicators

#### LED indicators inside:

ISO (yellow)  
On-air (red)  
Call (green)

#### LED indicators front:

1x on-air (red) adjustable

### General

**Power consumption:** 3.9W (supplied by camera head)  
**Operating temperature:** -20°C to +45°C (-4°F to 113°F)  
**Storage temperature:** -25°C to +70°C (-13°F to 158°F)  
**Weight:** 900 grams (2.0 lbs.)

### LCD

**Diagonal size:** 51 mm (2.0")  
**Resolution:** 960x540 pixels (QHD)  
**Response rate:** 16 ms

### Performance

**Color depth:** 16.7 million colors  
**8-bit color**  
**Brightness:** 250 cd/m<sup>2</sup>  
**Contrast ratio:** 200:1  
**Color temperature:** 6500K (adjustable)  
**Pixel pitch:** 0.047 mm x 0.047 mm  
**Supported formats:** All current HD formats  
**Input signals:** Y,Pr,Pb

The viewfinder's LCD panel is manufactured using high-precision technology that yields a pixel response of 99.99% or higher.

Note: EyeCatcher EC 2-100 is compatible with the LDX 100 series cameras only

# VF 8-100-H Viewfinder

The VF 8-100-H viewfinder for the Grass Valley LDX 100 Series cameras has native HD resolution in addition to high brightness and contrast as well as fast refresh rate, making it ideal for both indoor and outdoor use.



The VF 8-100-H is a compact, high-quality, flat panel color viewfinder designed to work with Grass Valley LDX 100 Series system cameras. The stylish design allows for direct mounting to the mini wedge plate of the camera head in both EFP and SuperXpander configurations.

With native HD 1920x1080 pixels, panel focusing becomes easy. In combination with high brightness and contrast, and a fast display refresh rate, the VF 8-100-H is the perfect color viewfinder for both indoor and outdoor applications.

The VF 8-100-H color viewfinder has an intuitive menu structure which not only allows for settings of the viewfinder, but can also be used to activate WFM and

Vectorscope functionality. Three rotary controls, for contrast, brightness and peaking settings, are easily accessible at the front panel.

It is possible to choose between two different mounting brackets that differ in their flexibility and adjustment range. The robust mounting bracket offers a lightweight, compact and very cost-effective solution in which the viewfinder can be rotated horizontally and swiveled up and down, but the height of the center of the screen cannot be changed. The larger and more flexible articulated mounting bracket also allows the height of the viewfinder to be adjusted, resulting in better ergonomics for the user in many applications.

## Key Features

- 7-inch LCD panel with LED backlight
- High brightness and contrast
- Full HD resolution with 1920x1080 pixels
- Adjustable box and markers
- Waveform and Vectorscope can be superimposed
- Supports all current and future formats
- Supports 4K/UHD operation
- Standalone operation with SDI or HDMI interface
- Fast response time
- Easy accessible viewfinder menu via viewfinder controls
- Two different mounts to choose from, the cost effective robust mount and the more flexible articulated mount

## Specifications

### Connectors

#### Camera connectors:

Future proof 9-pin Fisher connector  
SDI input  
HDMI input  
DC input: XLR 4-pin

### Controls

Menu button  
Menu rotary  
Input button  
Marker button  
Mono button  
Power On/Off  
Brightness rotary control  
Contrast rotary control  
Peaking rotary control

### Indicators

#### LED indicators front:

ISO (yellow)  
On-air (red)  
Call (green)

#### LED indicators back:

On-air (red) selectable: off/low/high

### General

**Power consumption:** 16W  
**Operating temperature:** -20°C to +45°C (-4°F to 113°F)  
**Storage temperature:** -25°C to +70°C (-13°F to 158°F)  
**Weight:** 1.2 kg (2.65 lbs.) without accessories

### LCD\*

**Diagonal size:** 177.8 mm (7 in.)  
**Active video:** 16:9 1920 (H) x 1080 (V) pixel  
**Viewing angle:** 170° in horizontal and vertical

### Performance

**Color depth:** 16.7 million colors  
8-bit color  
**Brightness:** 350 cd/m<sup>2</sup>  
**Contrast ratio:** 1100:1  
**Color temperature:** 6500K/9300K/user selectable  
**Pixel pitch:** 0.081 x 0.081 mm  
**Supported formats:** All current HD formats

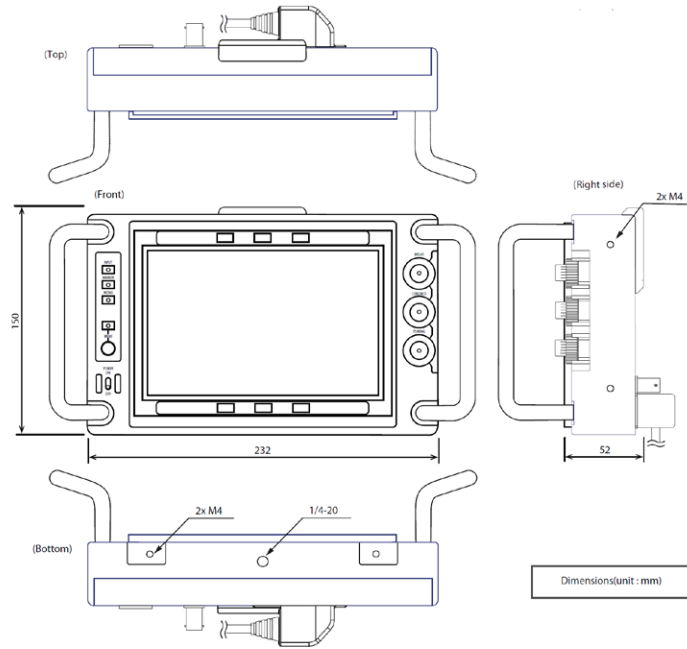
### Supplied Accessories

Short sunhood  
Cabling  
User's guide

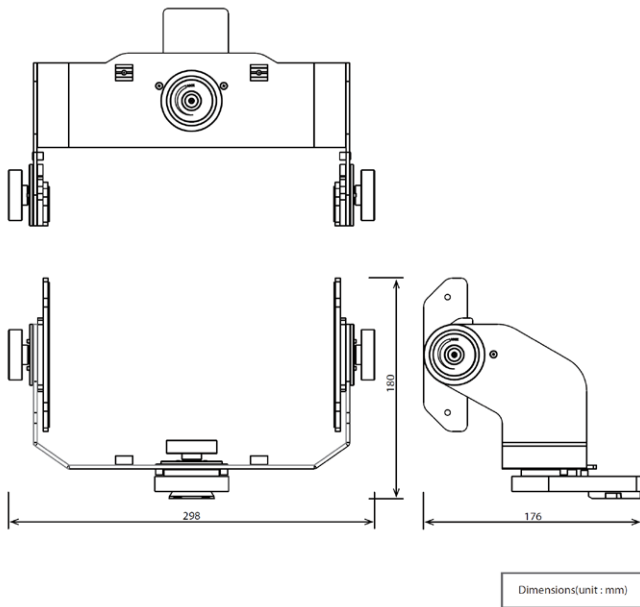
\* The viewfinder's LCD panel is manufactured using high-precision technology that yields a pixel response of 99.99% or higher.

Note: VF 8-100-H is compatible with the LDX 100 Series cameras only

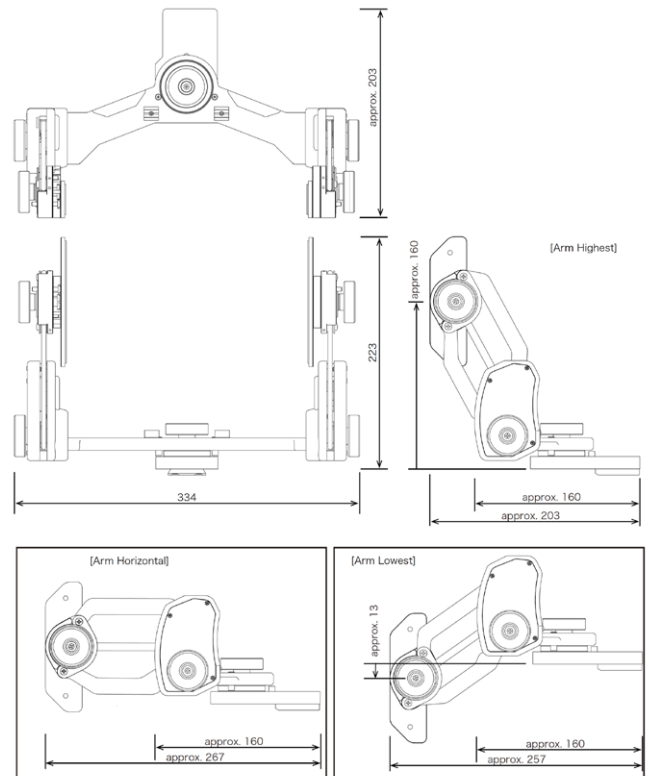
# VF 8-100-H Viewfinder Dimensions



## Robust Mounting Bracket



## Articulated Mounting Bracket



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