



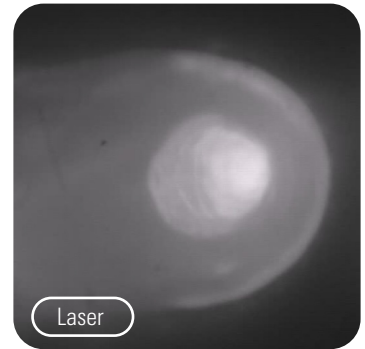
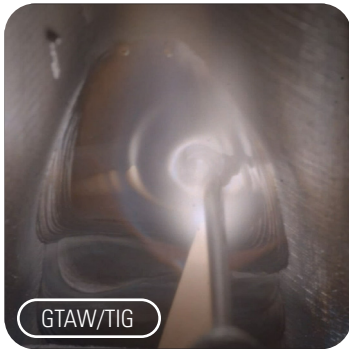
XVC-700/XVC-710 WELD CAMERA

Better Images. Better Decisions. Better Process Control.

Description

The Xiris XVC-700/710 weld camera is a 140+ dB High Dynamic Range (HDR) camera designed for seamless integration into welding automation systems where a lightweight, slimline camera is preferred.

Built using the latest advanced electronics and flexible PCB technologies, the XVC-700/710 delivers a fully digital image with exceptional clarity and stability across a wide range of welding processes.



Welding Specific Versatility

The XVC-700 is designed for maximum usability and flexibility in welding applications. Its lightweight, compact body, angled head options, onboard FPGA, and multiple compact optics configurations using industry-standard S-Mount lenses make it adaptable to a wide range of automated welding systems.

High Dynamic Range with Color

With an HDR exceeding 140 dB, the XVC-700 and XVC-710 capture detailed images with a greater range of tonal details. Operators can clearly view the intense weld arc without saturation and the surrounding features like the weld seam, melt pool, torch tip, and shielding gas. The XVC-700 is a monochrome model best suited for machine vision, while the XVC-710 is a color version ideal for processes such as GTAW, Plasma, and GMAW.

Software

The XVC-700 is compatible with all Xiris WeldStudio™ software, which provides comprehensive tools for camera control, image processing, analysis, recording, and playback. For system integrators, the WeldSDK enables full software integration into welding automation or Additive Manufacturing systems.

Angled Heads

The flexible electronic design allows the camera's optics to be angled relative to the body, enabling installation in tight or confined spaces. This feature helps minimize the overall size of the welding head in automated welding equipment.

GigE Interface with POE

A fully digital GigE interface enables high-bandwidth image transmission up to 100 m from the weld point without image degradation. The single M12 Ethernet connection with Power over Ethernet (PoE) simplifies installation and reduces the need for additional cabling.

Optional XVC-700T and XVC-710T Cameras

Allows triggering from an external controller, ideal for advanced MIG welding processes to capture images at consistent points in the welding cycle.

Accessories

A full range of accessories, including optics, controllers, HMIs, cables, power adapters, cooling plates, industrial housings, and optical design services, is available on a custom basis.

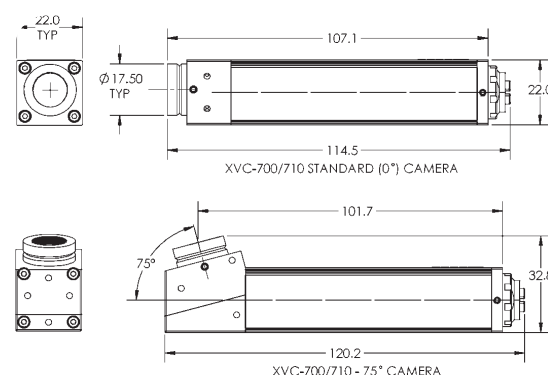
XVC-700/XVC-710 Camera Specifications

Dimensions (mm)	- 22 (W) x 22 (H) x 107 (L) (0° without optics)	Weight	- 89 g (without optics)
Software	- All Xiris WeldStudio™ - Xiris WeldSDK - Xiris SeamMonitor™	Operating System	- Microsoft Windows 10 (64Bit) or later
Head Angles	- 0° (Straight), 15°, 60°, 75°, 90° (Other available upon request)	Lens Mount	- Lockable S-Mount - Select C-Mount with adaptor
Camera Controls	- Shutter Mode, Exposure Time, Frame Rate, Picture in Picture, Sensor AOI (windowing)	Image Data	- XVC-700: Mono 8/12 - XVC-710: Bayer 8/12
Power Consumption	- Maximum 6 W Power Over Ethernet (POE)	Optional Trigger (T Cameras)	- 10-24V External Trigger I/O
Pixel Size	- 6.8 µm square (8.7 mm x 7 mm active area)	Filter	- Internal UV + IR Cut Filter
Image Sensor	- 2/3" HDR CMOS (Model XVC-700) - 2/3" HDR Color CMOS (Model XVC-710)	Shutter	- Global Shutter - Rolling Shutter
Camera Connector	- M12 Ethernet (X-Coded)	Shutter Range	- 10 µs to 100 ms
Dynamic Range	- 140+ dB	Compliance	- CE, FCC-B, RoHS
Temperature	- Operating: 0° to 35° C (No Cooling) - Operating: 0° to 80° C (With Cooling Plate) - Storage: -20° to 60° C	Humidity	- Operating: 20 to 80% - Storage: 20 to 95% (no condensation)
Optional protection Housings	- 0°, 15°, 75° for up to 260°C ambient with water cooling. (Other available on request)	Optional Illumination	- XVC-700/710 White LED Illumination

Standard S-Mount Lens Configurations

WD (mm)	FoV: H×V (mm)		
	F = 17.1 mm	F = 25 mm	F = 35 mm
70	29.5 × 23.5	20.5 × 16.5	10.5 × 8.5
100	44 × 35	31 × 25	18 × 14.5
200	93 × 75	66 × 53	42.5 × 34
300	143 × 115	100 × 80	On Request
500	217 × 193	168 × 136	

Camera Body Outline



The XVC-700 and XVC-710 are available in angled head configurations of 0°, 15°, 60°, 75°, and 90°.

[Talk to an Expert](#) for more information.

 **Xiris Automation Inc.**

5046 Mainway, Unit 2
Burlington, ON L7L 5Z1
Canada
T: +1.905.331.6660 | F: +1.905.331.6661
E: sales@xiris.com

 **Xiris Automation GmbH**

Holterkamp 18
40880 Ratingen
Germany
T: +49.2102.126.3835
E: sales@xiris.eu

 **Xiris Automation APAC**

Koh Kaew
Phuket 83000
Thailand
T: +66.8.2018.6618
E: sales@xiris.com

For local representatives visit www.xiris.com/contact. Specifications are subject to change without notice. February 2026.

Xiris is a registered trademark of Xiris Automation Inc. in Canada and other countries.