Xiris® xvc-1000e/1100e Weld Camera System



Better Images. Better Decisions. Better Process Control.



Why consider the XVC-1000e/1100e?

The **Xiris XVC-1000e/1100e** Weld Camera system is our second generation, all digital camera system intended for monitoring all open arc welding processes such as MIG, MAG, TIG, Plasma, EBW, Laser or Stick. The XVC-1000e is the monochrome version; the XVC-1100e is the color version.

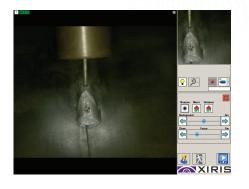
Combining sophisticated sensor technology with advanced electronics to provide high contrast, high dynamic range images, the **XVC-1000e/1100e** Weld Camera System delivers a clear view of a bright welding arc while still being able to see the surrounding environment such as the weld pool and seam.

The base package offers a complete robust system right out of the box, including Camera Module, HMI Console displaying the welding image, and rich software features that include camera controls, image recording and playback. Additional options include air or liquid cooling, Window de-dusting, and a variety of Console and Camera mounts. Both the Camera Module and HMI Enclosure are IP54 rated, able to withstand harsh welding environments.

The ability of the **XVC-1000e/1100e** to be installed remotely from the operator allows the welding process to be viewed up to 100m (330 ft) away, providing real time views of the torch, weld areas and surrounding material during standard and high power welding conditions.

These superior features make the **XVC-1000e/1100e** the logical Camera system choice for remote viewing of Open Arc welding applications including:

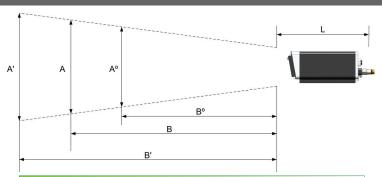
- Pipe Cladding
- Orbital Welding
- Tailor Blank Welding
- Training / Education
- · Ship Building
- Nuclear
- Pipelines
- Tube & Pipe Mills



Xiris® xvc-1000e/1100e - Weld Camera System

Benefits

- Reduced Set up time Better images reduce the time required to set up the weld tool and materials.
- Operational productivity Allows Operator to make corrective adjustments to the welding process "on the fly", reducing scrap and rework, and mitigating profit loss from weld failures in the field.
- **Troubleshooting** Provides the ability to verify that the weld process is functioning correctly and identifies the source of any potential problems.
- Health and safety Provides the means to remove the operator from the direct weld area, providing a guieter, cleaner, healthier and safer work environment.
- Video recording Provides ability to record, store and playback vital Welding Processes off line for Quality Assurance monitoring and Process Verification.



XVC-1000e/1100e Optical Specification Chart				
	XVC-1x00e125	XVC-1x00e90	XVC-1x00e50	XVC-1x00e40
Α°	91x73 mm	70x55 mm	46x37 mm	26x21 mm
Α	127x102 mm	89x71 mm	51x41 mm	40x32 mm
A'	208x167 mm	125x100 mm	57x46 mm	56x46 mm
В°	240 mm	185 mm	180 mm	190 mm
В	345 mm	240 mm	200 mm	300 mm
B'	570 mm	340 mm	230 mm	455 mm
L	156 mm	156 mm	156 mm	156 mm

Notes: A - Field of View

B - Camera Working Distance

L - Camera Body Length

A°, A', B°, B' range are achievable via the remote focus in the camera module.

System Specifications

General

Operating Ambient Environment	10°-35° C
Storage Environment	-20 to +60° C
HMI Console	
Dimensions	484mm (W) x 212mm (D) x 340mm (H)
Weight	16 kg
Input Power	100 - 240 VAC, 50 - 60 Hz
Display Size and Type	15" Flat Panel LCD Touch Screen
Computer	PC running Windows® 7
Console Environmental Rating	IP54 / NEMA 13
Hard Disk Storage	Able to hold up to 100 hours of recorded video
Cooling	Dual Continuous Fans
Other Ports	USB, VGA, Ethernet (Optional)
# of cameras per monitor	Up to 2

System Options

Window De-Dusting system	Camera and Console Mounting Options
Camera Air Cooling System	Active Camera/ HMI Console Air Cooling
Digital I/O Module	High Volume Video Drive

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Camera Module

Dimensions	Approx. 51 x 51 x 150 mm
Weight	0.550 Kg
Environmental Rating	IP54 / NEMA 13
Sensor	Ultra High Dynamic Range (140db+)
	Mono (1000e); Color (1100e)
Sensor Resolution	1280 (h) x 1024 (v) pixels
Remote Camera Controls	Gain, Motorized Focus, Light Control,
	Contrast Enhancement
Solid State Auxiliary Lighting	3 High Powered LEDs, controlled
	manually or via Weld-On Sensor
Camera Module Mounting	T-Slot, Compatible with M5 or 10-32
	Screws
Front Protection	Removable Protective Glass Cover
Cable Lengths	10 - 100m / in 10m increments

Software Functions

Crosshairs & Target Grid	Contrast / Brightness Adjust
Automatic / Manual Light Control	Image Sharpening / Blob Analysis
Ability to Record, Playback Video	Up to 100X digital Image Zoom
Image Rotation (0°, 90°, 180°, 270°)	Image Mirroring



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