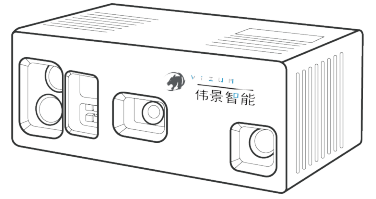


1 产品介绍

伟景智能星光眼Pro熔缝双测相机集静态面扫、动态线扫、高精度RGB、焊缝提取、焊缝跟踪、熔池监测六大功能于一体，是为攻克智能焊接痛点量身打造的智能感知设备。搭载第三目熔池监测专用镜头和补光灯，可在焊接过程中实时捕捉熔池的瞬态形态变化，清晰获取焊丝位置、焊缝成型状态等关键信息，及时捕捉异常偏差，为动态调整焊接参数、规避焊缝缺陷提供关键依据，显著提升焊接质量、减少缺陷并提高生产效率。

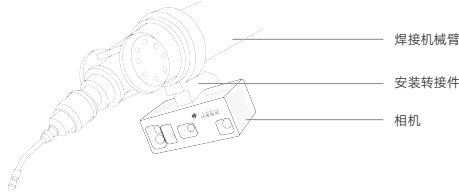


2 物品清单

- 相机 × 1
- 电源线和适配器 × 1
- 千兆网线 × 1

3 硬件安装

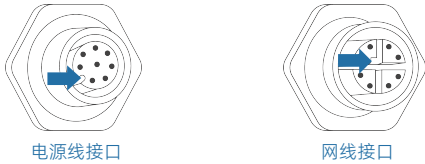
1. 使用安装转接件，将相机固定到机械臂上，如下图所示。相机底面和背面有安装孔，可固定安装转接件。



2. 相机第三目熔池监测镜头与Z轴方向夹角为35°，安装时应保证相机第三目熔池监测镜头视野覆盖焊枪末端及焊缝。



3. 安装电源线和网线，请注意对准插座上的缺口，如下图所示。插拔电缆不要使用蛮力，以免破坏插针。



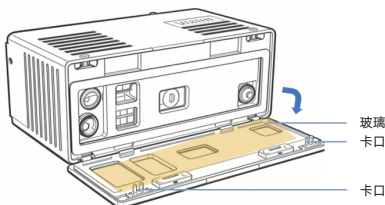
4. (可选) 将外部信号连接到相机配套的触发线缆，实现“电平使能”控制。更多信息请参考《3D工业相机用户手册》。

- 紫色线缆（触发输入信号_2）
- 蓝色线缆（触发输入信号_2-地）

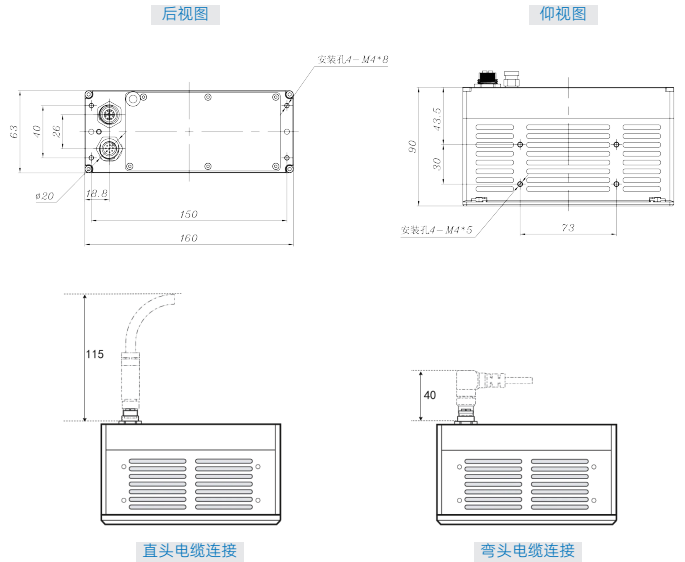
4 更换保护罩（可选）

如需清洁或更换相机保护玻璃：

1. 沿着转轴方向向下手动打开相机保护盖，取出保护盖内侧旧的保护玻璃。
2. 清洁旧玻璃或更换新玻璃，卡在保护盖内侧。
3. 向上翻转闭合保护盖，检查卡扣是否锁止到位，确认设备恢复密封。



5 尺寸和安装孔位置



6 注意事项

注意 本设备为高精度设备，请阅读并遵守下面的要求：

分类	项目	要求
相机安装板	材质	铝合金6061-T6。
	厚度	10mm及以上。（如果现场环境恶劣，振动大，安装板悬臂长，需要在安装板背面增加加强筋）
	安装面平面度	≤0.1mm。
电源	效果	安装后相机底面应完全贴合，无翘曲变形。
	电源输入	相机电源输入：24V±4V 电流≥2A 符合接地规范。220V交流电需提供符合国标。
	设备上电 断电要求	安装电源线时，请先连设备端，然后再连供电端。 安装设备和拆除设备时，必须先断开电源。
设备	稳定	确保设备安装牢固、电缆不松动。确保工作时设备不抖动，以免影响精度。
	结构	请轻拿轻放设备，避免使其受到强烈的冲击或震动。
	电磁	切勿将设备靠近强磁物品。请做好静电防护并使设备远离电磁辐射。
	清洁	请持续保持设备玻璃视窗的清洁。
	完整	切勿擅自拆卸设备，同时确保各类配件的完整。
人员安全	人身安全	请谨慎操作，安装时避免划伤、砸伤或坠落。
	保护	切勿直视激光，同时避免激光照射皮肤。

说明

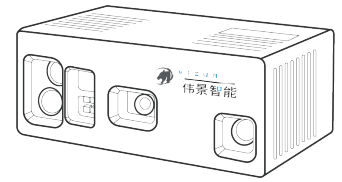
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1 Product Introduction

The ViEye Pro Seam & Pool Dual-Measurement Camera is an intelligent perception device specifically engineered to address critical challenges in automated welding. It integrates six core functions into a single unit: static area scanning, dynamic line scanning, high-precision RGB imaging, seam extraction, seam tracking, and molten pool monitoring.

Equipped with a dedicated "third-eye" molten pool lens and integrated fill light, the camera captures transient morphological changes of the molten pool in real-time during the welding process. It provides high-clarity data on key parameters such as welding wire position and seam formation, enabling the immediate detection of anomalies. This provides a critical foundation for dynamic adjustment of welding parameters and the prevention of defects, significantly enhancing welding quality while reducing waste and improving overall production efficiency.

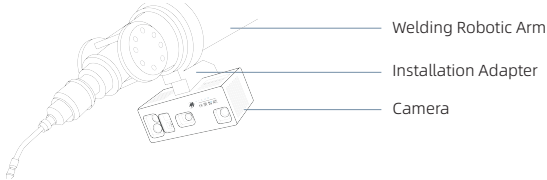


2 Bill of Materials

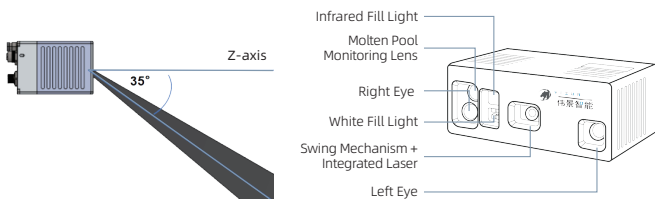
- Camera × 1
- Power Cable and Adapter × 1
- Gigabit Ethernet Cable × 1

3 Hardware Installation

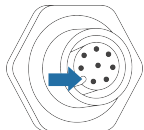
1. Use the installation adapter to mount the camera onto the robotic arm, as shown in the diagram below. The bottom and back of the camera have mounting holes for securing the installation adapter.



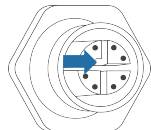
2. The "third-eye" molten pool monitoring lens is positioned at a 35° angle relative to the Z-axis. During installation, ensure that its field of view (FOV) fully covers both the welding torch tip and the weld seam.



3. Install the power cable and network cable, ensuring the connectors align with the notches on the sockets, as shown in the image below. Do not use excessive force when plugging or unplugging cables to avoid damaging the pins.



Power Cable Interface



Ethernet Cable Interface

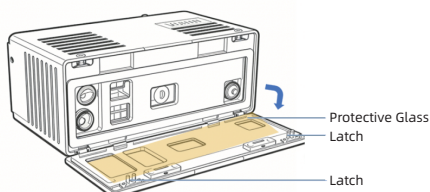
4. (Optional) Connect external signals to the camera's trigger cable to enable "level enable" control. For more information, please refer to *3D Industrial Camera User Manual*.

- Purple Cable (Trigger _ Input Signal 2)
- Blue Cable (Trigger Input _ Signal 2 - Ground)

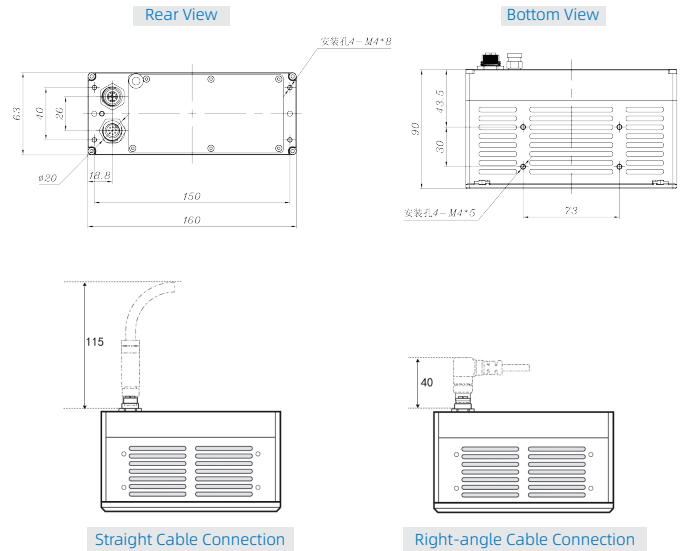
4 Replace the Protective Cover (Optional)

To clean or replace the camera's protective glass:

1. Open the Cover: Manually flip the protective cover downward along the axis and remove the old protective glass from the inner side of the cover.
2. Clean or Replace: Clean the existing glass or replace it with a new one, then adhere it back onto the inner side of the protective cover.
3. Close and Lock: Flip the cover upward to close it. Check that the latch is securely locked and confirm that the device's seal is fully restored.



5 Dimensions and Mounting Hole Locations



6 Precautions

Caution This device is a high-precision equipment. Please read and follow the requirements below:

Category	Item	Requirements
Camera Mounting Plate	Material	Aluminum Alloy 6061-T6.
	Thickness	10mm or greater. (Note: If the onsite environment is harsh with high vibration or long mounting plate cantilevers, reinforcement ribs must be added to the back of the plate.)
	Surface Flatness	≤0.1mm.
	Installation	The bottom surface of the camera must be fully flush with the mounting plate after installation, ensuring no warping or deformation.
Power	Power Input	• Camera power input: 24V ± 4V, current ≥ 2A , complies with grounding regulations . • 220V AC must meet national standards .
	Power On	When installing the power cable , first connect the device side , then connect the power supply side .
	Power Off	When installing or removing the device , the power supply must be disconnected first.
Equipment	Stability	Ensure that the device is securely installed and the cables are not loose . Make sure the device does not shake during operation to avoid affecting accuracy .
	Structure	Please handle the device with care to avoid strong impacts or vibrations .
	Electromagnetic	Never place the device near strong magnetic objects . Ensure proper electrostatic protection and keep the device away from electromagnetic radiation.
	Cleaning	Please continuously keep the device's glass window clean.
	Completeness	Never disassemble the device without authorization, and ensure that all accessories are complete.
Personal Safety	Safety	Handle with care during installation to avoid scratches, impacts, or dropping.
	Protection	Never look directly at the laser, and avoid laser exposure to the skin.

Note

- Due to product upgrades or other reasons, the content of this document may be updated periodically. Unless otherwise agreed, all content in this document does not constitute any express or implied warranty.
- For more information about the product, please visit the company's website.

