

VISIONAERY

There is no shortage to the list of ever-increasing technologies designed to automate critical processes. That is why Twin Eagle has created VisionAery. VisionAery is a set of services and products that allow you to take advantage of todays most advanced edge technologies while also being cost effective. With VisionAery, you can use more technologies and push more data from the edge to your office without straining your network.



Machine Learning/AI — VisionAery is an edge-based platform that utilizes machine learning and artificial intelligence to monitor your assets 24 hours a day. The solution applies machine learning in multiple areas throughout the platform. First, the cameras have machine learning capabilities that allow you to do basic analytics on site. That data is then fed into our edge computer which is where the VisionAery Optical Sensor Management interface is hosted. From there you can teach the VisionAery system to look for and alert on any specific events that you choose.

Because it uses machine learning and artificial intelligence, you can customize your deployment and actual teach the cameras what to look for. Common examples of this are PPE Detection, Flare Monitoring, Leak Detection, and more!



Remote Monitoring – VisionAery makes remote monitoring easy and cost effective. With our edge-based platform mixed in with our network connectivity features, it is a piece of cake to deploy a VisionAery system and start tracking your assets remotely. You can take advantage of VisionAery's automated site surveys and reporting using the optical sensor management interface, or if your more hands on, you can perform manual inspections with ease from the comfort of your desk or mobile phone. (Use Case)



Thermal and Radiometry — VisionAery also has a suite of thermal and radiometric applications that you can use to monitor and alert for temperature variations, and the best part is that it is much more affordable than traditional thermal cameras. But don't stop at just temperature monitoring. With our built-in machine learning, you can use thermal in an entirely new way. For example, you can use it monitor material build up inside of containers, gas leaks, or as a tool to predict when equipment is malfunctioning or needs to be repaired. The possibilities are endless.



Edge Computing – Twin Eagle created the VisionAery edge computing platform so you can process all your data on site and avoid straining your network. This is an important addition to the solution because it allows you to take advantage of the full power of edge technologies without bringing down your networks, SCADA systems, Databases, Clouds, and more. Another great advantage of edge computing is that the software needed to use machine learning and AI can live locally on the edge device rather than the cloud or the company headquarters. Lastly, the

VisionAery Edge Platform was built to ensure that customers could add future technologies to it and still have plenty of processing power at the edge.



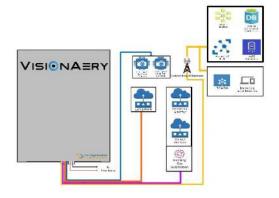
Optical Sensor Management – Any system deployed in an industrial environment is only as good as its ease of use. That's why Twin Eagle developed it's VisionAery OSM (Optical Sensor Management). With the VisionAery OSM, you can easily interface with the technologies you have deployed in your field. You can also set automations for site surveys or reports, and program new technologies while sitting at your desk. The best part is that it lives locally on the edge computer and automates visual inspection processes

whether or not someone is controlling it. Of course, you can manually control everything by simply logging in and viewing your assets remotely. The VisionAery OSM makes remote monitoring easy and affordable.



Network Connectivity – Twin Eagle has over 21 years of experience designing and deploying remote field area networks in industrial environments. So, it goes without saying that we designed VisionAery to have superior network connectivity capabilities. All VisionAery systems have cellular, CBRS, and 4G/5G capabilities, but even more important than that, it comes with a WAN port and NAT IP addressing. This makes it easy for you to plug VisionAery into your existing network and use the out of the box IP address scheme the comes standard with VisionAery. Connecting your new system just became easier and much less time consuming.





Data Conversion Capabilities – Along with being easy to integrate into your network, we also made VisionAery capable of converting incoming video and sensor data and integrating that into your existing systems such as SCADA. VisionAery can speak common coding languages such as MQTT or Modbus so that you can easily integrate your new VisionAery system into your SCADA or other systems.



Security – Because of today's cyber threat landscape, especially in industrial environments, we made security a top-of-mind priority for all our VisionAery systems. As a standard, we install Fortinet's EDR (Endpoint Detection and Response) software on our edge computers. We also have a Next Generation Firewall upgrade option if you choose to beef up your cybersecurity posture out on the edge.



Remote Management – We know that one of the main reasons you would deploy an edge technology like VisionAery is so that you can decrease the amount of time your people have to drive to get to your remote sites. That's why we made VisionAery almost 100% remotely managed. With VisionAery, you can power cycle all equipment remotely rather than having to do a physical reboot. You can also monitor and control power settings using the TYCON power monitor that lives locally in the VisionAery enclosure. You can also program, engineer, and manage all systems remotely from your computer.



Optional Features

Brown Field Integration – If you are hesitant to deploy a VisionAery network of cameras because you already have a network of security cameras on site, then don't worry. Twin Eagle partnered with Bosch to overcome this issue. You can now take full advantage of the VisionAery suite of analytics while using existing camera infrastructure. We have created a machine learning box that lives locally inside the VisionAery enclosure that can hook up to your existing cameras and turn them into smart machine learning and AI cameras.



Stand-Alone Design – In any remote setting, it is difficult to ensure that power and infrastructure to mount on are always going to be present. That's why Twin Eagle designed a solar powered skid that allows you to use our VisionAery system without power or mounting infrastructure on site. This skid offers you 3 days of autonomy on a full charge. This skid also comes in two different designs. The first design can be hooked up to your trailer and driven away, or you can deploy our portable skid for semi-permanent set up's.

Superior Support – As mentioned before, Twin Eagle has over 21 years of industrial support experience. We have a team of engineers and field techs that can help you with anything from phone support to turnkey field installations, programming, and integration. We also offer managed services where we maintain your VisionAery Network of solutions for you.

Purchase Model

Cap Ex Model – Most competitors in this space will try to lock you in with an Op Ex sales model. At Twin eagle, we see this as a bad way to do business. Once you purchase a VisionAery system, we believe that you should own it, and in turn, own the data that you get from it. That is why we offer a Cap Ex model that allows you to make a onetime purchase of your system with no additional monthly costs to use your hardware and own your data. (Software is an annual charge, and services from Twin Eagle are billed on an as needed basis.)

Set Up a Demo

Click Here for Demo Request Form

or contact support@twineaglesolutions.com with any questions.

