

## EXPERION<sup>®</sup> FLARE WATCH

### Product Information Note

**Honeywell Experion<sup>®</sup> Flare Watch Suite provides a solution for efficient flare monitoring and recording. By offering insights into flaring operations, this solution helps organizations manage flaring more efficiently and in compliance with local and corporate environmental regulations.**

Flaring is an integral aspect of operations in oil & gas, petrochemicals, and other process industries. It can be continuous, as part of the process, or used as a safety device during emergencies due to process disruption.

Flaring has been identified as a major source of environmental emissions. Regulatory agencies and corporate policies mandate compliance to clean flaring practices to reduce emissions. This requires monitoring and recording of flaring operations. Companies must demonstrate proactive measures to deal with emissions and show a strong environmental commitment. It is also an operation that can trigger public concern, inquiries, and complaints about facility safety and environmental stewardship.

Regulations established by the Environmental Protection Agency (EPA) set flare operating limits and also control visible emissions. Plant operators who fail to adequately identify black smoke (i.e., improper combustion) and vented gas (i.e., no flare) conditions during flaring are subject to fines and other legal actions.

Around the world, standards enacted by government agencies and local regulatory bodies are driving operating companies to seek solutions for efficient monitoring and recording of flaring.

### Need for Effective Flare Monitoring

Plant operators responsible for flaring control need to visually monitor the flare and manage it by controlling the flow of gases, steam, and assisted gases to ensure a compliant operation. Due to the changing composition of the flared gases, their flow needs to be adjusted frequently to maintain clean flaring.



The Honeywell Experion Flare Watch suite of solutions enables efficient monitoring and recording of flare operations.

## FEATURES & BENEFITS

- Enables efficient flare monitoring, recording, and reporting
- Reduces operator load in continuous monitoring of flares
- Alerts operator on detection of black smoke, steam, or high flare conditions
- Enables efficient flaring and reduction in noncompliance incidents
- Minimizes time spent on flare data analysis for reporting
- Ensures efficient & cost-effective recording of flare images for long term archiving and reporting
- Data supports analysis for improving flaring operations
- Rapid deployment  
Leverages current camera setup looking at flares
- Enables faster response and team collaboration
- Increases confidence in flare management and compliance

Flare monitoring has traditionally been performed on a manual basis, with a plant operator visually monitoring the flare and recording incidents like the occurrence of black smoke. This procedure is both inefficient and prone to errors. Human attention span is limited, and operators can get distracted by other work or urgent matters. This can result in missing an incident like black smoke, excessive steam when monitoring the flare for an extended period, and can lead to non-compliance or inefficient flaring.

## **Honeywell's Standardized Solution**

Honeywell's Experion Flare Watch offers an efficient solution for flare monitoring and recording, helping process plant operators comply with the local and corporate environmental regulations while managing flaring with greater efficiency and reliability. This is accomplished using a standardized system that is not only cost-effective, but also easy to implement and maintain.

The Experion Flare Watch suite includes two independent solutions: Smart Flare Monitoring and DVM Flare Snapshot Manager.

## **Intelligent Monitoring & Detection**

Experion Flare Watch – Smart Flare Monitoring uses a standard IP camera for monitoring the flare and combines it with Artificial Intelligence (AI)-based analytics to help plant operators reliably detect abnormal flaring scenarios like size of the flare, black smoke, and steam.

The Smart Flare Monitoring solution employs AI technology to monitor the dynamic flare and smoke in challenging backgrounds and environments. The use of deep learning algorithms enables accurate and reliable detection of abnormal flare conditions like size of the flare, black smoke, and steam in real-time and alerts the operator to take immediate corrective action – ensuring efficient monitoring and control of the flare. The recorded event data can be used by teams to review flare alarms and events to improve flaring efficiency. Periodic, incremental analytic model updates offered through the Honeywell software assurance

program allows the system to become more intelligent with time.

The rich, web-based interface for smart flare monitoring allows for easy and secure access to key stakeholders such as HSE and operations teams. This supports better real-time collaboration and use of recorded data for reporting and improvement in flaring operations.

## **Efficient Recording & Storage**

Experion Flare Watch – DVM Flare Snapshot Manager is a Honeywell Digital Video Manager (DVM)-based application that provides efficient recording and storing of flare images.

Regulations in many countries mandate that flare images be recorded and records are maintained for up to three to five years.

Part of Honeywell Digital Video Manager (DVM), DVM Flare Snapshot Manager allows users to record an image at defined interval with date and time stamp from the DVM recordings, and archive the image file in well-organized folders by camera name and day for easy retrieval.

Recording flare data as images is more efficient than recording them as a video, as it enables reduction in storage space and cost. It also allows for easy sharing of data and reduces the effort required in retrieving images for reporting or analysis. The recorded data can also be employed for post-event analysis for improvement in flaring controls and efficiency

As part of DVM, a comprehensive video management platform that seamlessly integrates with Honeywell's Experion PKS process control system, the DVM helps users monitor more process areas by simply adding cameras to the DVM system.

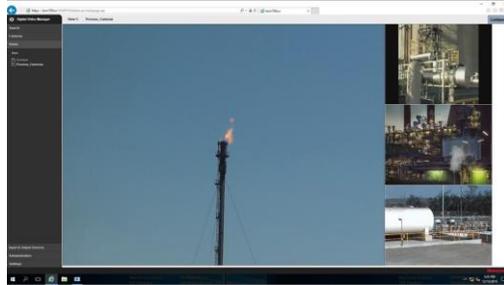
## **Digital Video Manager (DVM)**

DVM is Honeywell's unique digital video platform that seamlessly integrates with Experion PKS and Experion Industrial Security platforms.

*Around the world, standards enacted by government agencies and local regulatory bodies are driving process industry companies to seek solutions for continuous monitoring and recording of flaring operations.*

*Honeywell Experion Flare Watch enables process plant operators to reduce flare-related non-compliance incidents, while helping to increase flaring efficiency.*

Delivering enterprise-wide access to process and security video, the DVM solution is field-proven in a wide range of industries, including marine, nuclear, chemicals, metals, minerals and mining, oil and gas, power generation, pulp and paper, and refining. It is the most trusted industrial digital video solution for increasing safety, security, and process performance.



## Benefits to Customers

Honeywell customers realize several key advantages from Experion Flare Watch:

- Comprehensive solution for monitoring and recording flares
- Incremental addition to current flare monitoring set-ups
- Easy migration of legacy CCTV system with minimal hardware changes
- Reduced operator load in continuously monitoring the flare
- Faster corrective actions via alerts, which can help reduce flare-related

non-compliance events while increasing flaring efficiency

- Secure and easy access to multiple stakeholders enabling collaboration.

## Support Services

Honeywell Solutions comes with worldwide support services, which ensures users retain the solution benefits over the lifecycle of the offering.

Honeywell's complete portfolio of service offerings extends the life of our customer's plant automation assets and provides a cost-effective path forward to the latest application technology.

## About Honeywell

With over four decades of experience and global operations, Honeywell offers the process industry's most extensive engineering and consultancy experience. Our worldwide network of support resources backs a best-in-class product and service portfolio.

Speak to us today about how we can assist you in developing safer and more reliable and efficient operations.

## For More Information

Learn more about how Honeywell Experion Flare Watch improves performance, visit [www.honeywellprocess.com](http://www.honeywellprocess.com) or contact your Honeywell account manager, distributor or system integrator.

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PN-20-16-ENG  
October 2020  
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