Remote Tank Monitoring and Alarm Management

Capability Overview



- Overfill protection to API RP2350
- Alarm protection to IEC61508
- Web based remote status monitoring
- Wireless and cable telemetry systems
- Interfaces to your existing instruments



Profile

Corporate Overview



the remote monitoring company

OMNIFLEX has been designing and manufacturing electronic products and systems for the automation and control industry since 1965.

We specialise in providing solutions to industry in the fields of Remote Monitoring, Critical Alarm and Event Management, Data Acquisition and Control, and Energy Management.

Omniflex has been providing systems for tank monitoring since the 1980's providing expertise in overfill protection systems, remote status monitoring and real-time alarms.

Solutions provided have ranged from petro-chemical tank farms to chemical storage tanks, diesel tanks and wine vats.

These proven solutions are being relied upon every hour of every day by major corporations around the world.

An investment in solutions that carry such a large responsibility requires confidence in our track record, and the continued expansion of some of the world's giant industries using OMNIFLEX technologies, is sufficient testimony to this support.

Don't ask us - ask our loyal customer base.

www.omniflex.com/tank

your link to reliable solutions in remote tank monitoring.







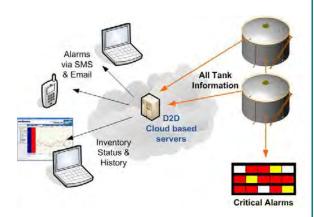


Strategy

The Total Solution

The Total Solution

For companies that need to monitor the contents of storage vessels, and who are dissatisfied with their current inventory control and risk management, Omniflex provides a full suite of real-time monitoring options from SIL approved alarms to web-based remote monitoring.



Consolidated Reports

Unlike instrument vendor specific solutions that are limited to providing subsets of your total data monitoring needs, Omniflex provides the capability to interface to all your existing instrumentation regardless of the brand or age, to provide a single consolidated view of your inventory, plus ensuring compliance with health and safety directives.

One secure place for all your information.

How?

Omniflex combines its years of experience of alarm management and safety systems in the petrochemical and nuclear industries with the latest technology in remote monitoring to provide an integrated solution for tank monitoring.

Health and Safety

By providing secure cloud based storage of data in real-time, Omniflex can provide independent reporting to health and safety executives assured that the data is free from manipulation by operational staff.

Whether your need is safety related leading from directives such as API RP2350, or compliance related as directed in FDA CFR21 Part 11, independent secure logging and reporting is a vital component of compliance.

 $\textbf{Measure} \rightarrow \textbf{Manage} \rightarrow \textbf{Save}$

Who can Help?



Omniflex has expertise in safety instrumented systems and remote monitoring and can provide an independent assessment of your needs to meet safety, environmental and inventory management goals.

Tank Overfill Protection...

Ensuring our safety

Critical Alarms

Omniflex is the world leader in IEC61508 safety certified smart alarm annunciators.

Omniflex Alarms integrate with your existing gauging instrumentation to provide an independent alarm system per the recommended practice prescribed by the American Petroleum Institute API RP2350 and Buncefield report.



Remote Alarming

Many facilities are un manned after working hours thus leaving gaps in the local monitoring coverage. Remote alarming and monitoring provide the organisation an on-call option to mobilise help/expertise should an event arise.

Omniflex have pioneered cost effective solutions for independent remote monitoring of existing infrastructure.

Omniflex Systems focus on your critical alarms avoiding the overburden nuisance factors which ultimately undermines the alarm system credibility



Any Field Devices

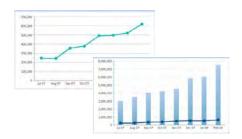
Omniflex systems do not prescribe gauging and field equipment. Since type of gauging is often dictated by the stored materials, the market is characterised by many specialised vendors. Omniflex provides interfaces to most existing or preferred gauging systems.



Record Keeping

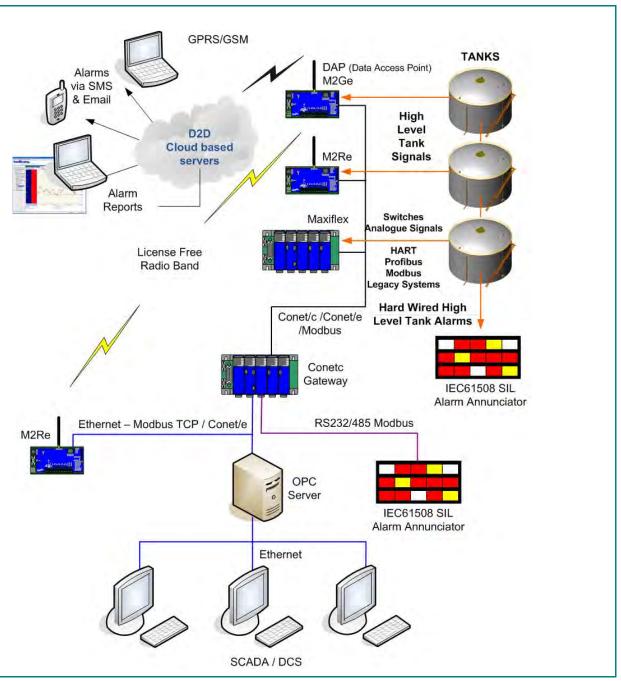
Omniflex systems can provide an independent record of events and regular proof testing to ensure compliance with safety regulations.

These reports can be sent directly to compliance officers. This can ensure that operating procedures required to meet safety regulations are maintained, and can provide a complete tamper-proof log of events if an incident occurs.



... Solutions

Overfill Protection: Critical Alarms & Remote Monitoring



- Independent Alarm Monitoring to IEC61508
- > Interfacing to multiple vendors' gauges
- Connections to existing DCS and SCADA systems
- Remote Monitoring and Alarm Reporting



Bulk Storage Monitoring...

Remote monitoring done right

Shared Facilities

Whether you run a production facility and want to share tank levels with your suppliers, or a vendor wanting to manage the inventory on customer's sites, Omniflex has a suitable solution for your needs.

Many Bulk storage facilities are shared between users and thus monitoring responsibility is spread over the user base.

Monitoring of these facilities can present logistics challenges due to shared responsibilities.

The cloud based Data2Desktop monitoring system provides easy to implement solutions to share monitored data with multiple users quickly and easily.



Geographically Large

Omniflex excels at difficult data network applications.

Reduce installation costs dramatically by using existing cables and/or secure wireless communications to reach the furthest corners of your site.

Omniflex's ability to interface to most vendors' equipment makes it the ideal choice for data acquisition and control allowing legacy equipment to be integrated into modern monitoring systems with relative ease.

Geographically Spread

Integration of multiple Bulk Storage Sites spread geographically can be incorporated into a single managed system in real time using the proven Data2Desktop Cloud Data Service.

Integrate this data into your distribution and procurement systems for real-time inventory management.

Corporate Health and Safety can also benefit by automating data collection from multiple sites without human intervention.



Environmental Monitoring

All Bulk storage facilities can have an impact on the environment and surrounding areas if not monitored in real time.

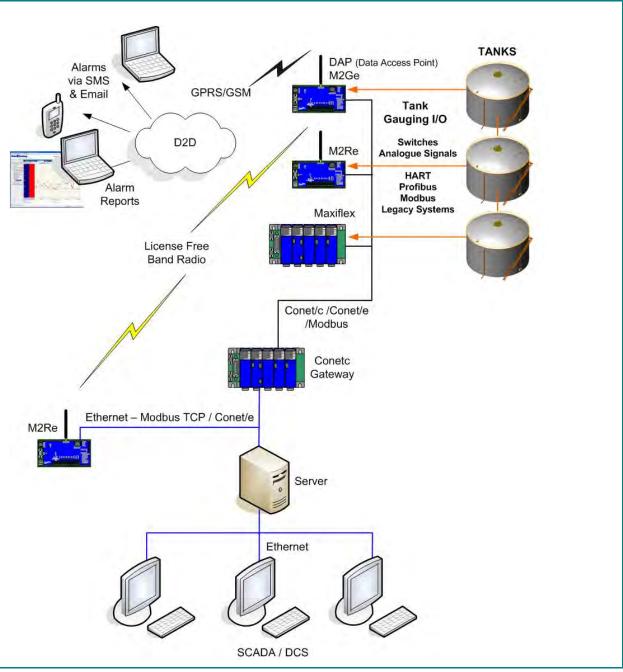
Environmental legislation is tightening, and long term monitoring and data collection (burden of proof) falls to the facilities owners in cases of litigation and compliance.

Omniflex is able to integrate the Environmental Monitoring (Ground water, Air Sampling Systems) into an integrated surveillance system for effective Health and Safety Executive management.



... Solutions

Bulk Storage Monitoring:



- Independent Remote Monitoring per tank minimises installation
- Interfacing to multiple vendors' gauges
- Connections to existing DCS and SCADA systems
- Remote Monitoring and Alarm Reporting



Vendor Managed Inventory...

...wherever you are

Multiple Sites

Vendor Managed Inventory is characterised by many widely distributed sites, often with only a single tank to monitor.

The supplier takes responsibility for the delivery and maintenance of stock on site, and maintaining a reliable service to the end user is crucial to a successful business.

By remotely monitoring these sites, stock holding and delivery costs can both be reduced without affecting customer service.

The Omniflex Data2Desktop system is ideal for providing the remote monitoring per site and integrating all sites into an aggregated system for effective management purposes.



Value Added Features

The Data2Desktop Service provides both the end user and vendor with accurate near real time status. Alerts can be automatically generated for various criteria with acknowledgements and alert escalation to ensure management effectiveness.

Many derived benefits can be realised out of the data gathered including delivery confirmation, delivery efficiency. forecasting demand and management of KPIs for service delivery.

Reduced Burden on Sales

Very often in vendor managed inventory systems the burden falls to sales consultants to manage the stock which in most cases is impractical, inefficient and unreliable.

Data2Desktop automates these functions ensuring that all parties can share data but most importantly the actionable data is routed to the correct people with zero human intervention.

Increased Efficiency

Procurement and logistics are the big winners with Data2Desktop services being able to action orders in good time and forecast outages on current usage data. Optimization of the transport costs by scheduling resupply more efficiently and proactively is clearly a desirable and essential management objective.

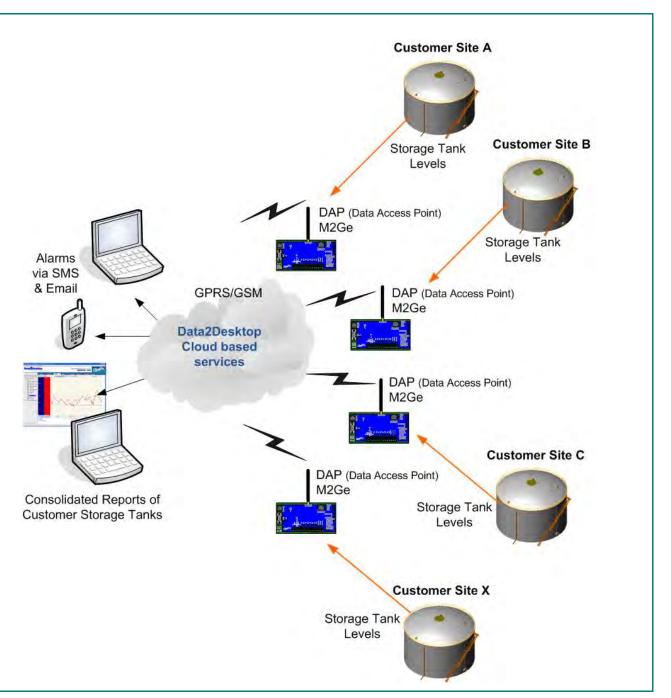


MIS/ERP Integration

Integrate this data into your distribution and procurement systems such as SAP and BAAN, for real-time inventory management.

... Solutions

Vendor Managed Inventory: Increase Service Levels



- Live inventory levels available from anywhere
- Share the data between supplier and customer
- > Interface to EIS systems for complete inventory management
- Remote Monitoring and Alarm Reporting



Health & Safety

People Planet Profit

People. Planet, Profit

With triple bottom line reporting now the norm for good corporate governance, managing Health, Safety and Environmental KPI's in real-time is imperative.

The harsh reality is that many Health and Safety executives are remote and isolated from their day to day influence.



Reliance on plant reports, management summaries and data captured manually by operational staff makes many of the Health and Safety surveillance functions historical at best.

An integrated remote monitoring solution from Omniflex can provide the vital link of real-time information at a surprisingly cost effective rate.

Data2 Desktop provides:

- Critical alarm management
- Compliance monitoring and recording
- Automated HSE logs and reporting
- Automated alerts
- Environmental monitoring

Bringing you closer

Bringing the executive closer to the day to day plant operation means independent monitoring with the opportunity to intervene in time on non compliance issues.



Data2Desktop offers the capability to bring you closer by providing real-time automated reporting from remote sites, and eliminating delays and inaccuracies caused by manual reporting.

 $\textbf{Measure} \rightarrow \textbf{Manage} \rightarrow \textbf{Save}$



Compliance & Safety

Are you sure?

Compliance & Safety

American Petroleum Institute (API) Recommended Practice 2350: Overfill Protection for Storage Tanks in Petroleum Facilities and **IEC** 61511: Safety Instrumented Systems for the Process Industry Sector can both be used to address safety issues.

API 2350 takes a prescriptive approach and IEC 61511 uses a functional safety approach.

In light of some recent major accidents, (Buncefield) the industry is moving to a more functional approach that addresses a wider range of issues.



While API 2350 is being revised to reflect this trend, companies want to be consistent with both the API document and the more general IEC 61511.

Omniflex Alarm Annunciators are the only smart annunciators approved for use in the UK nuclear industry

Why might you fail to be in compliance even if you have the required prevention equipment?

It takes more than equipment to be in compliance to have a safe facility. You must operate and maintain this equipment properly over time.

Without independent monitoring the best equipment can be rendered useless and ineffective by poor maintenance or lax operational procedures.



Omniflex can assist by careful examination of the core issues around your tank automation.

Building around the requirements for safety, and taking advantage of emerging technologies, we can design systems to accommodate both of the standards and still manage the operational and budget constraints.

Ask how Omniflex can help with your Remote Tank Monitoring

www.omniflex.com/tank www.omniflex.com Solutions by Design