THE EYES AND BRAIN OF YOUR VALVE.

Intelligent Valve Monitor (IVM)











Industrial plant's pipeline has long lacked clear feedback on valve status, putting plant at potential risks and unexpected operational halts. IVM addressed this issue by continuously monitoring valve status and provide critical valve information.











PRODUCT FEATURES



Emission Detection

Continuously detects emissions in real time, allowing immediate response to contain leaks, minimize risk, and maintain system integrity.



Valve Position

The sensor precisely measures valve angles to 360°, ensuring accurate closure and leakage prevention, and also identifies on/off positions.



Valve Torque

Torque monitoring informs maintenance based on real valve wear, therefore enhancing longevity and reducing unexpected downtime.



Traceability

The integration with Transworld's traceability system ensures accountable operations, aiding in troubleshooting and enhancing maintenance reliability.



Cycle Counter

The cycle counter records the number of valve open/close actions, supplying data to inform proactive maintenance and enhance system safety.



LED Indicator

The LED light indicates valve statuses with seven customizable colors, facilitating quick identification and signaling issues to prevent incidents.

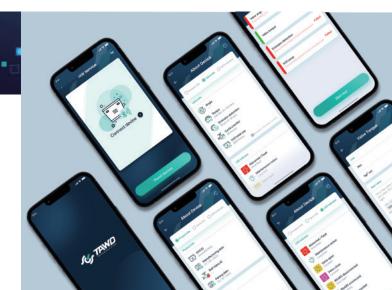
BLUETOOTH CONNECTIVITY & REMOTE MONITORING

The IVM utilizes Bluetooth to deliver immediate valve metrics and emissions data via a user-friendly app and web interface, ensuring quick troubleshooting and improved safety while presenting all essential details at a glance.









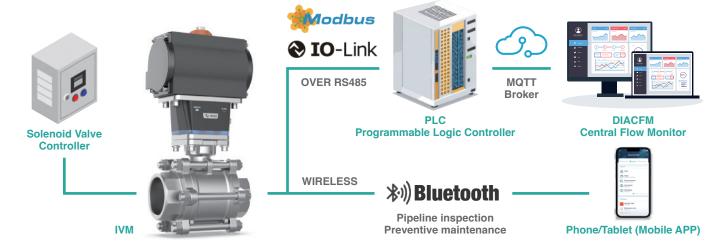


HOW IT WORKS

Transworld has pioneered an IIoT system that stands at the intersection of modern advancements and the approaches of the Industry 4.0 revolution. Strategically positioned between the valve and actuator, this direct contact at the source enables detection of subtle changes, offering authentic data to improved system performance and safety.

INTEGRATION WITH MODERN TECHNOLOGIES

This system facilitates the seamless incorporation of the latest technological breakthroughs, opening avenues for further innovations and improvements. It facilitates the adoption of smart technologies, offering a platform that is ready for the future and can adapt to evolving technological landscapes. In the modernized setup facilitated by the IVM, operators are relieved from the necessity of using limit switches and intricate sensor wiring. This significant shift brings forth a range of substantial benefits, fostering an environment of improved safety and streamlined operations, as detailed to the right.



We offer MQTT to customers to facilitate the creation of an enterprise management situation room to elevate the factory's security.

Predictive Maintenance

IVM enable early detection of potential issues, allowing for timely maintenance and reducing unplanned downtime. This proactive approach ensures consistent production quality.

Industry 4.0

IVM empowers Industry 4.0 by enabling data sharing and informed decision-making. It analyzes data to optimize performance, enhancing factory agility and responsiveness.

Plant Safety

These monitors provide real-time insights into valve operations, helping to identify and prevent safety risks before they escalate, protecting both personnel and equipment.

WIRELESS

Sustainability

IVM reduce the need for multiple devices, leading to sustainable operations that is cost efficient. They also detect emissions early, helping to prevent environmental pollution.

TECHNICAL DATA

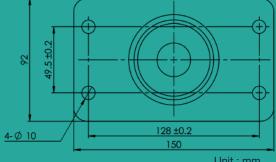
Specification	
Material	Stainless Steel and Polycarbonate (PC)
Data record system	300 records (30 days cycles)
Operating temperature	-30°C ~ 70°C
Power supply	M12 A-Code 8pin Connector DC24V
IP ratings	IPX5
Applicable Valve Size	ISO5211 F10
Dimension	L150*W92*H84 (mm)
Weight	2.7kg
Monitoring media	Mobile App

Product features	
Maximum torque	245 Nm
Maximum pressure of emissions	126 Kpa
Detection zone	360°
Tolerance	±0.1

Connection type		
Wired transmission	Modbus RTU	
Wireless transmission	Bluetooth 5.0	

IVM PLATFORM SPECIFICATION

Four M8xP1.25 holes with a depth of 10mm need to be prepared on the actuator for the assembly of the IVM.







IVM improves plant safety and reliability by offering instant valve status feedback via an app with LED indicators.

It prevents disruptions and reduces risks by facilitating predictive maintenance through advanced sensors for accurate data.

IVM signifies the advancement of industrial processes towards efficient, safe, and tech-driven maintenance.



BEYOND DATA INSIGHT, WE DELIVER DATA FORESIGHT.

