

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.





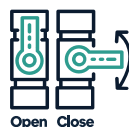
INTELLIGENT VALVE MONITOR

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

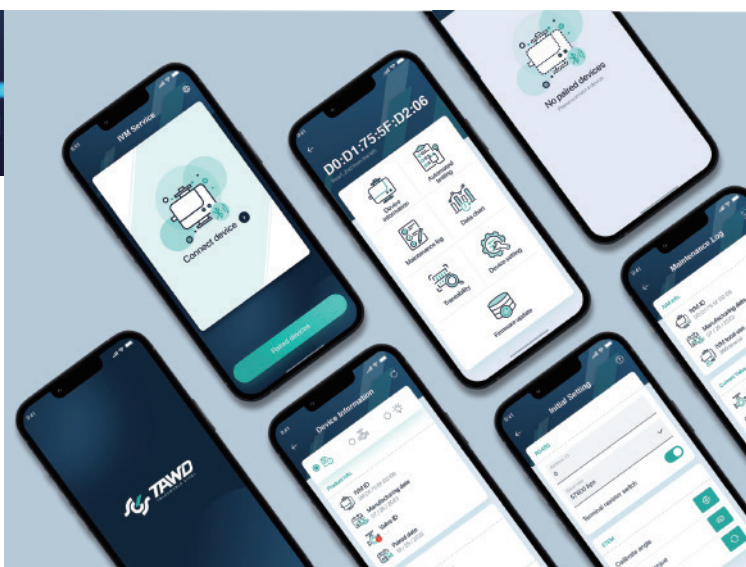
The IVM utilizes Bluetooth to deliver immediate valve metrics and emissions data via a user-friendly app and web interface, ensuring quick troubleshooting and improved safety while presenting all essential details at a glance.



Bluetooth®

Available on the iPhone
App Store

ANDROID APP ON
Google play





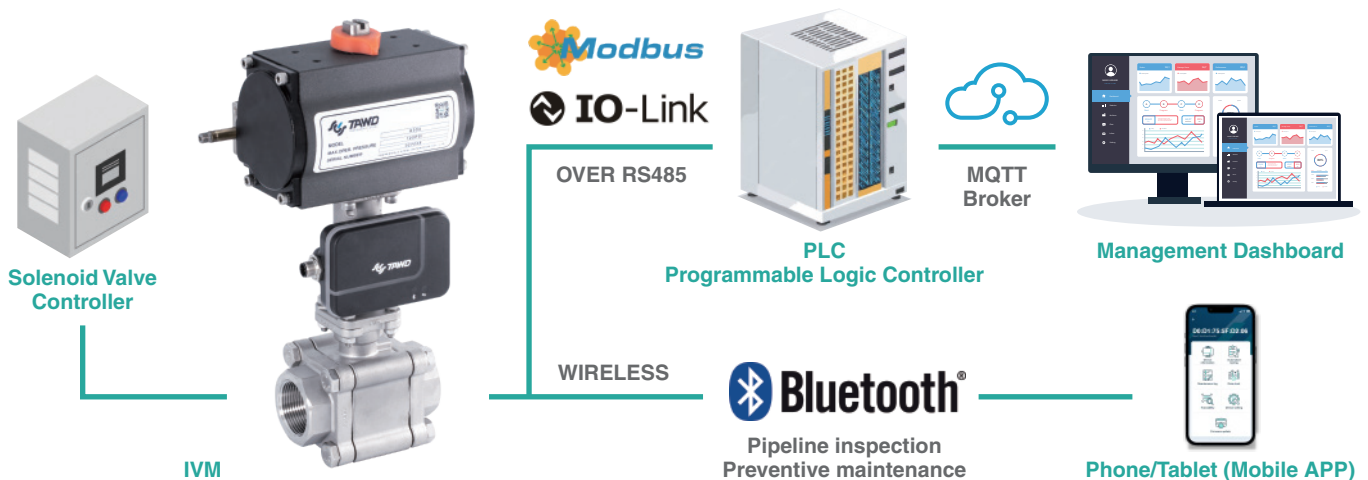
HOW IT WORKS

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.

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.

SPECIFICATIONS

Specification	
Traceability	Serial Number
Material	Stainless Steel and Polyamide (PC)
Applicable Valve Size	ISO 5211 F04-F14
Record time	300 records (30days cycles)
Ambient temperature	-30°C ~ 70°C
Fluid operating temperature	-55°C ~ 260°C
Electricity	
Power supply	M12 A-Code Connector DC24V

Communication		
Wired transmission	Modbus RTU IO-Link	
Wireless transmission	Bluetooth 5.0	
Technology		
Intuitive display	High visibility LED (Seven colors setting)	
IP ratings	IP68	
Weight	2.8kg	
Warranty	1 year	
Safety function	Monitoring torque	Max 520 Nm
	Monitoring emissions	126 kpa
	Monitoring Zone	360°
	Tolerance	±0.1°
	Used time/cycles	Maintenance and
	Life time	inspection notice
Certification	CE	



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.



Transworld Steel Enterprise Co., Ltd.

Tel +886 4 2271 6107 **Fax** +886 4 2271 6127 **Address** No. 34, Gongye 14th Rd., Dali Dist., Taichung City, 412038, Taiwan (R.O.C.)