

INDION® Remote Monitoring System

Remote monitoring plays a very important role in monitoring plant performance remotely without being present at the actual site. This helps to manage multiple systems in real time.

Remote Monitoring And Location Tracking System:

Ion Exchange Remote Monitoring provides unique and exclusive functionalities that help the customer to monitor the plant performance remotely. This system helps users to configure the alerts for process at strategically placed locations and access critical data continuously or at pre scheduled time intervals.

It also enables to capture, analyze, store and share the data across user organizations. This makes it easy for the user to acquire and distribute the knowledge required to operate the water treatment plant. It also improves productivity by minimizing the down time by carrying out regular preventive maintenance. It provides accurate information regarding the process data enabling continuous monitoring of plant from any location and sends alerts to key operations and maintenance personnel when during abnormal conditions or equipment break down.



INDION® RMS 8001



INDION® RMS 8003

Parameters:

	INDION® RMS 8001	INDION® RMS 8003
Core	Quad-Band GSM 850/900/1800/1900 mHz	32bit ARM Cortex-M4F processor core, 120 mHz
Flash Memory	8 MB Flash	
Communication	RS232, RS485	RS232, RS485 & USB 2.0
Data Storage	NA	SD Card expandable up to 32 GB
GSM Modem	SMS Alerts, DATA Monitoring, EMAIL options & External Antenna	TCP/IP, FTP Protocols, SMS Alerts, DATA Monitoring, EMAIL options & External Antenna
Built-in I/O's	NA	6-Ch DI (24VDC), 4-Ch DO (Sink Output), 6-Ch AI (0~10V/4~20mA, Resolution: 12-bits)
Power Supply	8~24VDC	

Automation

Automation or automatic control is the use of various control systems for operating equipment such as machinery, processes in factories, boilers and heat treating ovens, switching in telephone networks, steering and stabilization of ships, aircraft and other applications with minimal or reduced human intervention.

It aims at achieving:

- Higher productivity
- Superior quality of end product
- Efficient use of energy and raw materials
- Improved safety in working conditions

Our main focus is Industrial Automation:

- Pneumatic control
- Hard wired logic control
- Electronics control

The control systems are built around special devices, designed to operate industrial machines and processes. We call these devices Programmable Logic Controllers (PLC) and Programmable Automation Controllers (PAC).

- Discrete modules use only a single bit to represent the state of the device eg. a switch is either open or closed. Therefore, the bit is either a 0 (switch is open) or a 1 (switch is closed). Discrete modules are also known as Digital modules.
- Analog modules use words to represent the state of a device. An analog signal represents a value eg. the temperature could be 5, 9, 20, 100, etc degrees. Analog modules use a value such as 52, rather than a 0 or 1 to represent the state of the device.

Services:

- Operation & Maintenance (O&M) - Comprehensive/Non-Comprehensive
- Rehabilitation, modification and upgradation
- Spares supply and consumable replacement
- Annual Maintenance Contract (AMC) - Comprehensive/Non-Comprehensive
- Water audit
- Water treatment on rental
- Online BOD/COD analyser

For more information write to us at: inst.sales@ionexchange.co.in

To the best of our knowledge the information contained in this publication is accurate. Ion Exchange (India) Ltd., maintains a policy of continuous development and reserves the right to amend the information given herein without notice.

INDION is the registered trademark of Ion Exchange (India) Ltd.

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ANALYTICAL
INSTRUMENTS
FOR MONITORING
WATER QUALITY

SPECIAL INSTRUMENTS
ONLINE EFFLUENT MONITORING SYSTEM

AUTOMATION

INDICATORS

REMOTE MONITORING SYSTEM

ONLINE CONTROLLERS / TRANSMITTERS

Introduction

Industrial water quality must be closely monitored to achieve high levels of operational efficiency and also safeguard plant and process equipment from corrosion, microbial fouling etc. In addition, it is also important to meet stringent discharge norms.

Ion Exchange is a pioneer in water treatment in India and is one of the largest water and environment solution providers in Asia. With over five decades of expertise, sustained focus on customer needs, intensive product and application R&D, we offer a wide range of analytical instruments for monitoring water quality for process, utility and also quality of effluents discharged.

Parameters measured for pre treatment:

- Turbidity Transmitter
- Chlorine Transmitter

Parameters measured for water treatment:

- pH
- Conductivity

Parameters measured for waste water treatment:

- pH
- Dissolved Oxygen (DO)
- Chemical Oxygen Demand (COD)
- Biochemical Oxygen Demand (BOD)
- Total Soluble Solids (TSS)

INDION® Water Quality Monitoring Instruments

Parameters	Standard Sensor Ranges	Types of Enclosure		Electrical	
		Panel Mounted	Field Mounted	Panel Mounted	Field Mounted
Chlorine	Potentiostatic Electrode based: 0-2ppm/0-20ppm Polarographic membrane based: 0-2ppm/0-20ppm	IP 54 enclosure	IP 65 enclosure	110-230 VAC ± 10% regulated	110-230 VAC ± 10% regulated
Turbidity	4-400 NTU & 40/4000 NTU				
Dissolved oxygen	0-20 ppm				



Panel mounted sensor



Field mounted sensor

INDION® Water Quality Measuring Indicators

	Models	Key Features	Standard Sensor Ranges	Types of Enclosure		Electrical	
				Panel Mounted	Field Mounted	Panel Mounted	Field Mounted
Conductivity	DM 50 (2½ Digit) CON 50 (3½ Digit) DM 50 W (3½ Digit & 4½ Digit)	<ul style="list-style-type: none"> • Low cost and consumable • Efficient & accurate readings 	0-20 µs/cm, 0-200 µs/cm, 0-2000 µs/cm	IP 54 enclosure	IP 65 enclosure	110-230 VAC ± 10% regulated	110-230 VAC ± 10% regulated
pH	FM 4 FM 4 W		0-14 pH				



pH Indicators with Sensor



Conductivity Indicators with Sensor

INDION® Online Controllers & Transmitters

Parameters	Standard Sensor Ranges	Types of Enclosures		Electrical	
		Panel Mounted	Field Mounted	Panel Mounted	Field Mounted
Conductivity	0-20 µs/cm, 0-200 µs/cm, 0-2000 µs/cm	IP 54 enclosure	IP 65 enclosure	12-24 VDC ± 10% regulated	110-230 VAC ± 10% regulated
pH	0-14pH				
ORP	-1000mV to +1000mV				
Resistivity	20MΩ				



Panel mounted Conductivity sensor



Field mounted pH/ORP sensor

Online Effluent Monitoring System

UV BOD/ COD SENSORS - PL, GL & M Series

This system monitors data real time to meet the stringent norms of effluent discharge as specified by Central Pollution Control Board (CPCB), State Pollution Control Board and National Green Tribunal (NGT).

Range of products:

PL FULL WAVELENGTH - Full scanning analysis is commonly used for BOD and COD measurements in complex water sources.

GL MULTIPLE WAVELENGTH - Multiple wavelength analysis is commonly used to detect BOD and COD in a simple matrix.

M UV 254 nm and 550 nm - Single wavelength UV254 analysis is a cost effective method that can be used to detect BOD and COD in a simple matrix.

Specifications:

	PL – SERIES	GL – SERIES	M – SERIES
Range	User configurable ranges between BOD 0-1275 mg/L COD 0-2400 mg/L (*range extended with optional Dilution System)		
Wavelength	200-750 nm	200-750 nm	254 nm and 550 nm
Sampling Time	1 minute	1 minute	10 seconds
Calibration	Exclusive technologies allow for continuous automatic calibration during operation		
Cleaning	Automatic chemical cleaning		
Operator Interface	External PC Controller with 10" colour LCD 800x600		
Outputs	MODBUS, RS485, 4-20mA, USB Drive, Cell Modem		
Light Source	Deuterium & Tungsten Lamp	Xenon Lamp	Mercury UV Lamp
Lamp Source	4000 hrs per Lamp	2-5 years	2 years
Enclosure	IP66, NEMA 4, wall mountable		
Technology	Split-Sense Pro	Split-Sense Pro	Split-Sense Pro & Ortho-Beam
Electrical	24 VDC 220W power adapter	24 VDC 120W power adapter	24 VDC 40W power adapter
	(accepts 250 VAC/50Hz)		