



# 2060 Human Interface

The power of automation  
in process analytical  
technologies (PAT)

**PUSHING  
THE  
LIMITS  
TOGETHER**

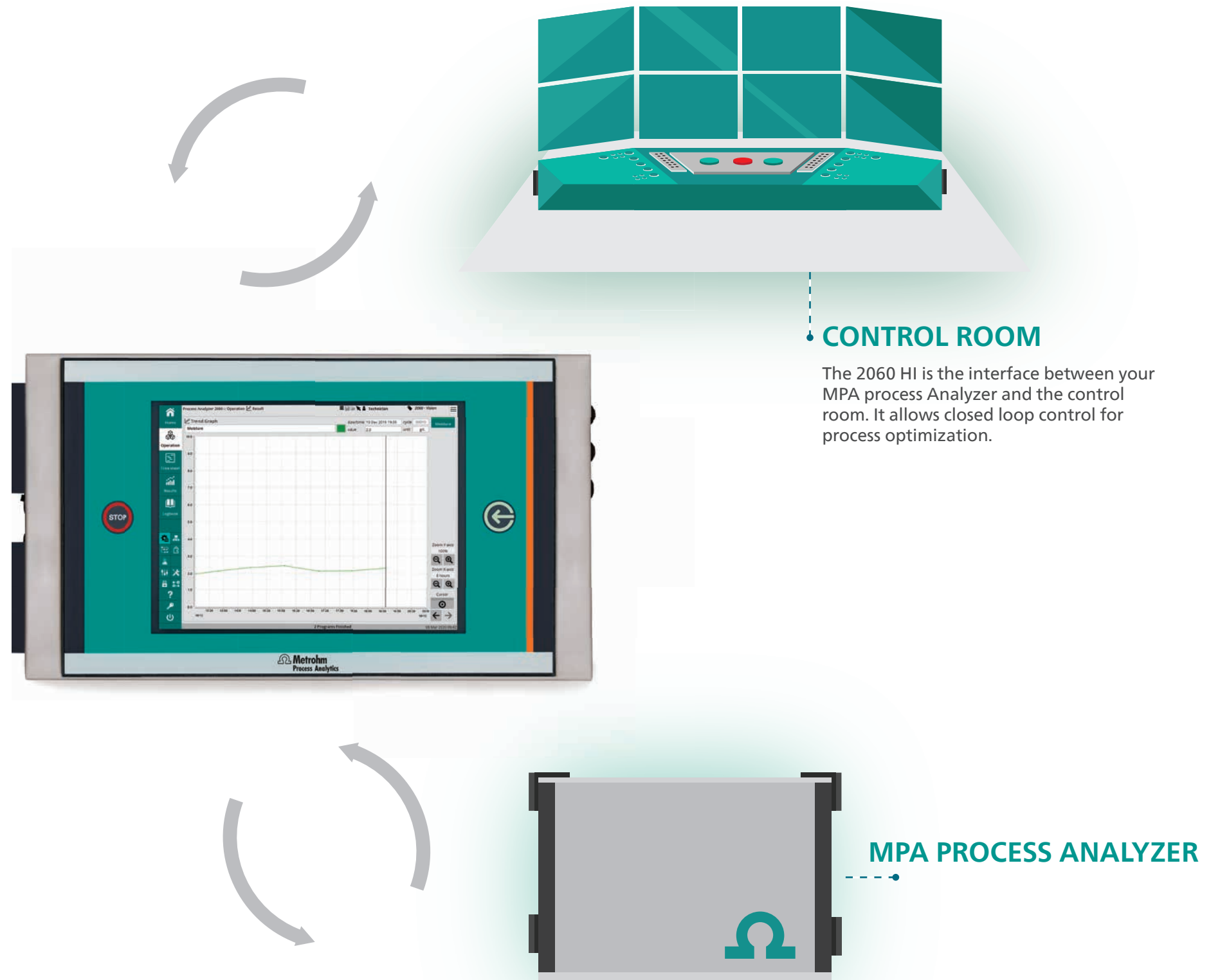
 **Metrohm**  
Process Analytics

# 2060 Human Interface

## Much more than an industrial process controller

Based on the 2060 online analysis platform, the 2060 Human Interface (HI) is a unique process controller solution for Metrohm Process Analytics process analyzers. It features hardware and software functionalities to automate online and inline analysis for multiple industries. It not only connects, controls, and displays results from process spectrometers (e.g., NIR or Raman), it also transmits valuable results to any Distributed Control System or Programmable Logic Controller (DCS, PLC) through industrial communication protocols to retrieve process data from sensors. The 2060 HI is configured to activate liquid modules such as pumps or valves, to display results in a fully configurable fashion, and to configure alarms for process upsets.

The automation can take place in two ways: the 2060 HI sends measurement results to the PLC/DCS, which in turn transmits control logic for process adjustments, or the 2060 HI is used as a unique standalone controller that can automatically control sampling panels for process analysis.



### USER FRIENDLY INTERFACE

Customized to tackle any challenge, the 2060 HI user interface can be fully configured based on the user needs with the possibility e.g. to display multiple trend charts and/or take corrective action in the process.

### SMART DIAGNOSTICS & ALARMS

Top-notch self-diagnostics and alarms conditions, ensures valid results and early detection of hardware failures.

### MAXIMUM UPTIME

The 2060 HI has dedicated hardware to ensure a maximized uptime. It always runs to a power buffer which overcomes power outages.

### SAFE USE

Humans make mistakes, but intelligent machines do not. The 2060 HI is a closed system with an embedded operating system and built-in user management system to prevent routine users from making such mistakes.

# Durable and Reliable

## A rugged housing for every application

The 2060 HI is designed to maximize the uptime of the analysis system and to prevent errors that might occur during data transfer. It can be installed next to the process analyzer itself or in a remote location depending on the requirements.

### SMART CONNECTIONS

Thanks to the variety of process communication protocols offered with the 2060 HI (e.g., Modbus or Discrete I/O), process data can be communicated to any industrial control system or directly to external devices, and is accessible 24/7 if requested.

### VARIOUS INSTALLATION METHODS

The 2060 HI can be configured inside of a holding frame, which can be mounted in various ways: wall mount, or floor stand.



### FULLY REMOTE CONTROLLABLE

The 2060 HI is a high-resolution touch screen controller, which enables users to easily check trend graphs for a clear overview of the process. This human interface can be controlled remotely to immediately evaluate results from the safety of a control room, or can be connected to the Metrohm Process Analytics online support system.

### WEATHER-PROOF

Extreme elements are no problem here. The 2060 HI is splash proof and watertight, making it the perfect solution for harsh industrial environments. Process operators wear special protective gloves in such environments, which can safely remain in place to use the resistive touch-screen of the 2060 HI.

### SECURE YOUR DATA IN CASE OF POWER FAILURES

The 2060 HI has a power buffer module integrated to keep the system running during short power outages. In addition, a power fail control logic (PFCL) board monitors the analyzers, state continuously and manages power up/down procedures efficiently during any loss of power.

### PROPRIETARY IO CONTROLLER BOARD

Do you want to have current state of your Metrohm Process Analyzers in your plant? This is possible with the 2060 HI. Its IO controller board offers maximum connectivity with analog and digital input and output, as well it offering serial ports to connect sensors and small modules (e.g., switches, valves, pumps, sensors...) to offer a completely automated solution that is flexible and cost-effective.

### GET THE MOST OUT OF YOUR ANALYZERS

Most power outages are short and can cause errors and shutdowns of process analyzers if they are not designed correctly. The 2060 HI PFCL and the power buffer ensure that the system does not lose power and if the outages are too long, the system will be shut down and restarted in a logical and error-free sequence.

### IN-PLANT INSTALLATION

The 2060 HI is housed in a stainless steel enclosure rated at IP65. This means that this human interface can resist any weather conditions, corrosion, and dangerous vapors. It is also designed to be installed in the plant, either wall mounted, or on a frame, depending on your requirements.

### MULTI-TECHNOLOGY ANALYSIS

Versatility and flexibility define the Metrohm 2060 process platform. With that concept in mind, the 2060 HI is designed to be connected to process spectrometers (Near infrared and Raman) and to wet chemistry analyzers (titration and ion chromatography) to tackle any industrial challenge.

# Automate, control, and predict

## A fully configurable user interface for your process needs

The 2060 Software is a complete solution offering a wide range of possibilities for process monitoring and automation. It facilitates the acquisition of analytical data from Metrohm process analyzers, displays and transfers results to any PLC/DCS, seamlessly connects to external systems (e.g., sensors), and smoothly executes advanced programs.

Decades of experience have given Metrohm Process Analytics unique application knowledge to know that each application is unique and challenging. With the 2060 Software, advanced programs can be tailor-made to perfectly match each application. As each program is independent, the 2060 Software can be programmed to monitor multiple measuring points at the same time.

Operation screens are another key feature of the 2060 Software. The 2060 HI can be programmed to show multiple operation screens another key feature of the embedded 2060 Software. They can be defined to control connected sampling panels to pretreat process samples, to display results in different formats, and to perform routine diagnostics. Also, users can fine-tune methods to reflect any changes in the process, and set limit conditions and alarms to control the analyzer.

## EASE OF USE



### TAILOR-MADE PROGRAMS

Operation screens are the interface for routine access at basic levels and can be fully customized to match the operator's needs.

### FULLY AUTOMATED ANALYSIS

For each process unit, several programs can be defined and launched using the user interface or remotely by using inputs from the DCS or PLC.

### CONTROL YOUR SAMPLING SYSTEMS

Sampling panels can be controlled with the 2060 HI for 24/7 management and easy diagnostics.

### FULLY RELIABLE OR HIGH SPEED RESULTS

Results from external devices such as sensors can be displayed in full (e.g., temperature or flow rates) for additional important process data.

### ALL RESULTS IN ONE PLACE

Operators can navigate from one operation screen to another simply by the press of a button, allowing easy visualization of trend charts and results per dedicated process unit.

### DISPLAY RESULTS AS YOU DESIRE

Trend charts can be fully tailored: combined trend charts, individual trend charts, upper and lower limits, etc.

### DO NOT MISS ANYTHING

All results and events are logged ensuring full traceability of the analysis.

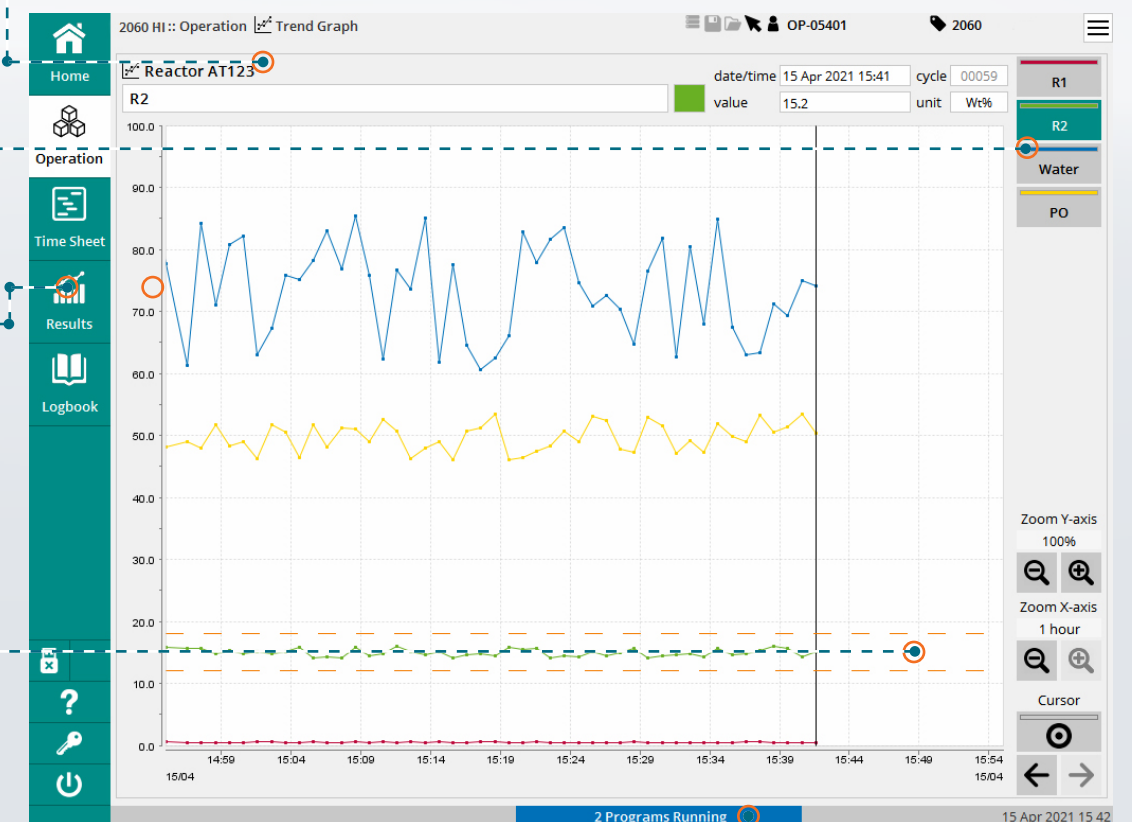
### SET ALARMS AND REMINDERS

Alarms can be set up based on user defined upper and lower limits. Alarms can be transmitted to the PLC/DCS to take further actions.

### MONITOR YOUR ANALYSIS IN REAL TIME

Status dialog windows gives users full awareness of the analyzer status at all times.

## RESULTS AT YOUR FINGERTIPS





# Entering Industry 4.0 with Metrohm Process Analytics



Manufacturing industries are progressing through Industry 4.0 by integrating digital and physical worlds in an advanced effort to make a digital transformation. Creating the future's chemical plants requires bringing data from the physical into the digital world. This data must be turned into useful information by performing real-time visualizations and analytics. The information must be translated into decisions and actions, and then back into movements in the physical world. A complete digital transformation requires advanced automation, such as that offered by industrial process analyzers. From power plants and refineries to wastewater treatment plants, terabytes of data are used daily to optimize various processes across all the industries, but if the data quality is poor then poor decisions will be made. Manual data collection adds even more challenges and can reduce yield, affect product quality, and expose personnel to hazardous conditions. Process analyzers offer several distinct advantages over manual data collection because they give real-time results that allow for true optimization. These analyzers turn data into practical information that can be used to improve safety, efficiency, and profitability. Contact your local Metrohm Process Analytics dealer for more information.

[www.metrohm.com](http://www.metrohm.com)