



DS-I/O BOX® for BIOPAT®

DS-I/O BOX[®]

DIGITAL

SCADA

I/O

BOX

STRENGTHS COMPARED TO COMPETITOR

- ✓ Smaller form factor
- ✓ SCADA integration
- ✓ Multinstruments
- ✓ Innovative User Interface
- ✓ BIOPAT[®] MFCS Compatible

Main Focus Point

Modularity

The system can handle two types of probes: BIOPAT® SartoFlow and BIOPAT® Pressure, with the possibility to decide the number of them to be inserted into the system

Flexibility

The system has an easy and intuitive probe configuration, suitable for every users even without any limitations. The user through the HMI can manage the probes

Easy to Use

This system has been designed for being Easy to Use from customer, and also from the Automation perspective

Security

The configurations access to configuration probes and system is protected by Password to ensure the security of the software

Connectivity

The system can be used via Web Client. Data can be exported to PDF files, XLSX files and shared on a folder or USB device.

Two type of BIOPAT® probes



BIOPAT® Flow



BIOPAT® Pressure

NO ADDITIONAL DISPLAY !!

Modularity



NO ADDITIONAL DISPLAY !!

Modularity

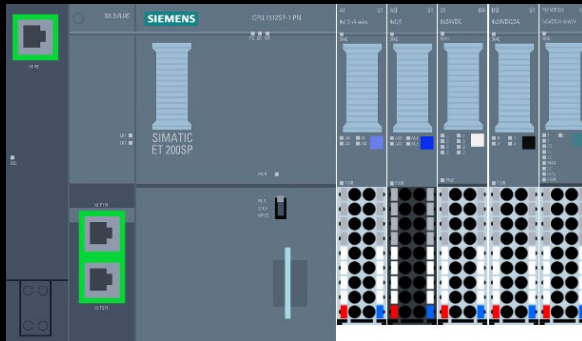


Integrated amplifiers allow us to manage BIOPAT[®] SartoFlow directly from the HMI

DS-I/O BOX[®]

SIEMENS ARCHITECTURE

Modularity



All the I/O modules are connected directly to the bus of the CPU for faster signal transmission



New generation of HMI panel for a modern UI, more storage capacity and better construction quality



ADVANCED REVISION

Modularity



Industrial pc for further innovations without technological limits



Remote access will allow the user to connect to multiple I/O boxes at the same time



PROBES

User can save the informations about the probes.

A dedicated page allows the calibration every **BIOPAT® Flow** and **BIOPAT® Pressure** probes configured.



Flexibility



BATCH RECORD

DS-I/O BOX[®] for
BIOPAT[®] can start a
Batch and record
all the data that are
taken from the
configured probes.

DS-I/O BOX[®]

BioPAT[®] Pressure

0,00 bar

0,02 bar

BioPAT[®] Flow

Affidabilità: 92%

-5 ml/min

Affidabilità: 89%

1 ml/min

NOME BATCH

▶

Easy to Use



BATCH REPORT

The user is able to do reporting of a batch.

Report can be saved and exported to external USB memory, into a shared network folder or downloaded from Web Client.

DS-I/O BOX®

Report task Parametri dell'ordine Impostazioni globali

<input type="checkbox"/>	Nome	Nome ordine	Tempo di creazione	File	Stato
<input type="checkbox"/>	Test ultimate_2408061849	ReportExport	6/8/2024, 18:49:48	<input type="checkbox"/> 66 KB <input type="checkbox"/> 54 KB	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<input type="checkbox"/>	Test official_2408061812	ReportExport	6/8/2024, 18:12:18	<input type="checkbox"/> 67 KB <input type="checkbox"/> 54 KB	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<input type="checkbox"/>	TEST_2408061806	ReportExport	6/8/2024, 18:06:40	<input type="checkbox"/> 67 KB <input type="checkbox"/> 54 KB	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<input type="checkbox"/>	TEST_2408061801	ReportExport	6/8/2024, 18:01:01	<input type="checkbox"/> 65 KB <input type="checkbox"/> 54 KB	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<input type="checkbox"/>	Test_prova_2408061755	ReportExport	6/8/2024, 17:55:28	<input type="checkbox"/> 66 KB <input type="checkbox"/> 57 KB	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<input type="checkbox"/>	Test_2408061735	ReportExport	6/8/2024, 17:35:04	<input type="checkbox"/> 66 KB <input type="checkbox"/> 56 KB	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<input type="checkbox"/>	START_2408011659	ReportExport	1/8/2024, 16:59:20	<input type="checkbox"/> 66 KB <input type="checkbox"/> 56 KB	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<input type="checkbox"/>	TEST_2408011656	ReportExport	1/8/2024, 16:56:53	<input type="checkbox"/> 66 KB <input type="checkbox"/> 56 KB	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

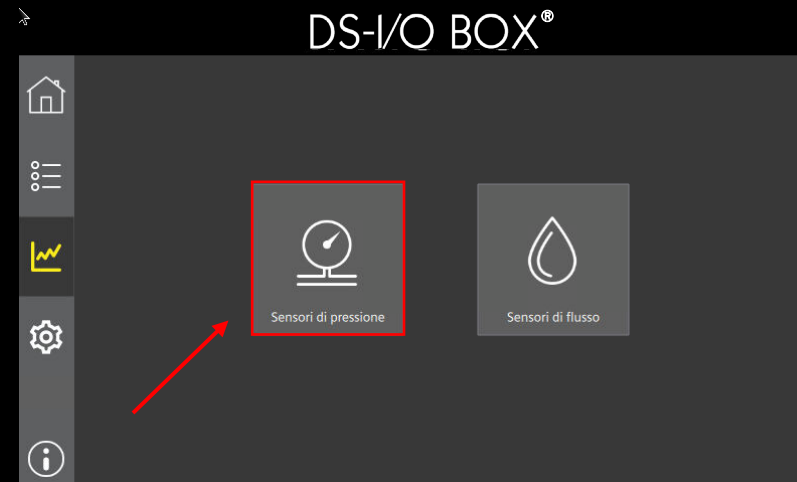
Visualizza informazioni

Easy to Use

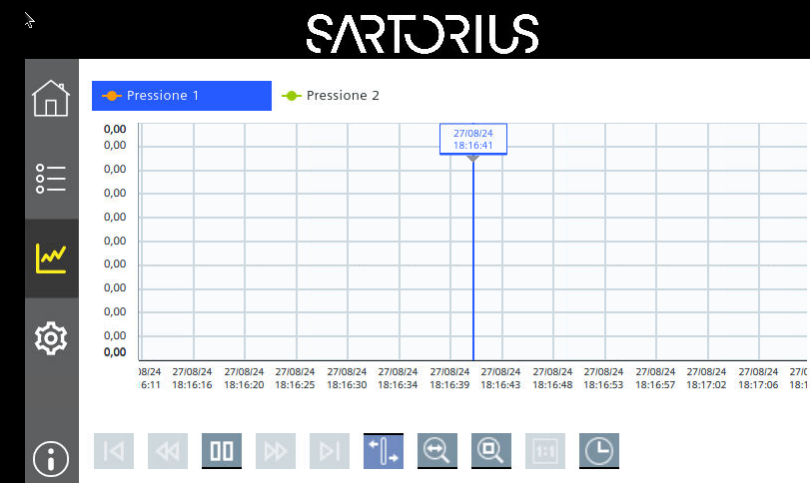
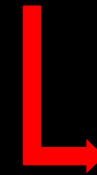
BATCH VIEW AND TREND

The user will always have a batch and trend view with all its details, also if the batch is still in running. The user can also put some filters to let him visualize some specific data.

When a batch is running the DS-I/O BOX[®] for BIOPAT[®] can visualize the recorded trend in real time.



Easy to Use





BATCH ALLARM

The Alarms section is designed to monitor and manage the system alerts generated by the device.

This section provides a comprehensive overview of all active and historical alarms, allowing for quick identification and resolution of problems.

DS-I/O BOX®

Utente: Admin Data: 05/07/2024 15:23:52

	BATCH	CALIBRAZIONI					
	Alarm class	Origin	Area	Alarm text	Modification time	Raise time	Status text
1	Acknowledgeme		HMI_RT_1:Alarm	Sistema bloccato	04/07/24 18:12:06	04/07/24 18:12:06	Incoming/Outgoing
2	SystemAlarmWit				05/07/24 10:22:49	05/07/24 10:22:49	Incoming
3	SystemAlarmWit		System/HMI/Run		05/07/24 15:18:03	05/07/24 15:18:03	Incoming
4	Alarm		HMI_RT_1:Alarm	Temperatura Alta	05/07/24 15:18:06	05/07/24 15:18:06	Incoming
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20							

Easy to Use



USER MANAGEMENT

The DS-I/O BOX[®] for BIOPAT[®] integrates a *User Management Module* that allows to control the access to the system and permit only the authorized users to use that. By default, the following users are set up:

Admin

Supervisor

Operator

Guest



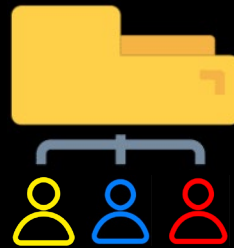
Security



ACTIVE DIRECTORY MODULE

Customer can use their own Microsoft Active directory to let the DS-IO-BOX[®] for BIOPAT[®] use their users and groups to let users login with their own company credentials.

The Administrator can also manage the groups inside the HMI.



Security

FDA 21 CFR PART 11

21 CFR Part 11

Every action made inside the HMI is recorded, in compliance with the 21 CFR Part 11. Within the Audit Trail view an authorized user can see every action performed within the HMI by each user. The Audit Trail can also be exported for auditing purposes.

DS-I/O BOX®

BATCH CALIBRATIONS User: Admin Date: 05/07/2024 11:54:28

Audit Trail Audit File Audit queries Global Settings

<input type="checkbox"/>	Time stamp	Audit provider	Type	Object reference	Object name	User	Operator station	Operation	Old Value	New Value	Language
<input type="checkbox"/>	7/5/2024, 11:35:36.868	User Management	User management			Admin	Controlroom Client	Updated		Admin	1033
<input type="checkbox"/>	7/5/2024, 11:25:43.807	User Management	User management				Controlroom Client	Updated	Admin		1033
<input type="checkbox"/>	7/5/2024, 11:08:21.590	User Management	User management			Admin	Controlroom Client	Updated		Admin	1033
<input type="checkbox"/>	7/5/2024, 10:48:55.305	User Management	User management				Controlroom Client	Updated	Admin		1033
<input type="checkbox"/>	7/5/2024, 10:25:52.578	User Management	User management			Admin	Controlroom Client	Updated		Admin	1040
<input type="checkbox"/>	7/5/2024, 10:25:23.545	User Management	User management				Controlroom Client	Updated	Service		1040
<input type="checkbox"/>	7/5/2024, 10:23:51.520	User Management	User management			Service	Controlroom Client	Updated	Admin	Service	1040
<input type="checkbox"/>	7/5/2024, 10:23:36.303	User Management	User management			Admin	Controlroom Client	Updated		Admin	1040
<input type="checkbox"/>	7/4/2024, 16:18:25.458	User Management	User management				Controlroom Client	Updated	Admin		1040
<input type="checkbox"/>	7/4/2024, 15:49:24.858	User Management	User management			Admin	Controlroom Client	Updated		Admin	1040

1 2 3 4 5 6 7 8 9 10 >> <<

Show information



Security

OPC UA CONNECTION

The DS-I/O BOX[®] for BIOPAT[®] either supports SCADA Systems, variables and alarms can be seen externally via OPC UA, with all the OPC UA Encryptions supported.

The DS-I/O BOX[®] for BIOPAT[®] system is compatible with:

- ✓ OSI PI (via OPC UA connector)
- ✓ MFCS 4 or higher
- ✓ DeltaV

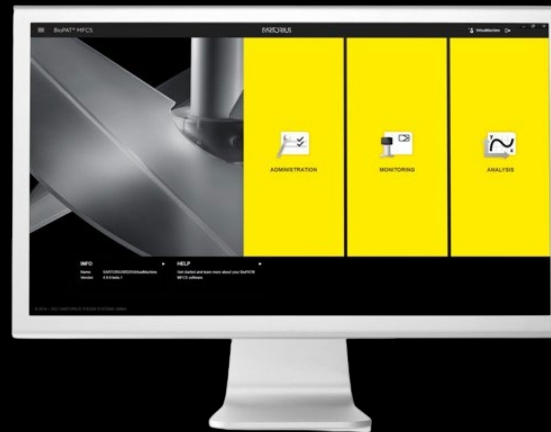
REMOTE CONTROL

It is also possible to connect remotely to the HMI, with a PC or tablet. The **DS-I/O BOX[®]** for **BIOPAT[®]** utilizes the VNC protocol, that let the customers to control the **DS-I/O BOX[®]** for **BIOPAT[®]** even when they are not physically there. Also, the **DS-I/O BOX[®]** for **BIOPAT[®]** can be controlled remotely in **GMP** areas, since no internet connection is required.



BIOPAT® MFCS COMPATIBILITY

As mentioned before, this system can also be configured with BIOPAT® MFCS 4 to read data from the DS-I/O BOX® for BIOPAT® unit or add the DS-I/O BOX® for BIOPAT® variables inside of an existing configuration.



Connectivity

DS-I/O BOX[®]

A new concept for connecting multiple instruments for pharmaceutical customers