

STANDARD OPERATING PROCEDURE

Sysmex CA-600 Series

Analyzer Interface Setup, Operation, Processing and Troubleshooting

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Controlled document: Use the current approved copy. Record local approvals and training before routine patient-result transmission.

Approval role	Name/signature	Date
Prepared by		
Reviewed by		
Approved by		

1. Purpose

To define the controlled setup, verification, routine operation, result review and troubleshooting procedure for the Sysmex CA-600 Series serial interface.

2. Responsibilities

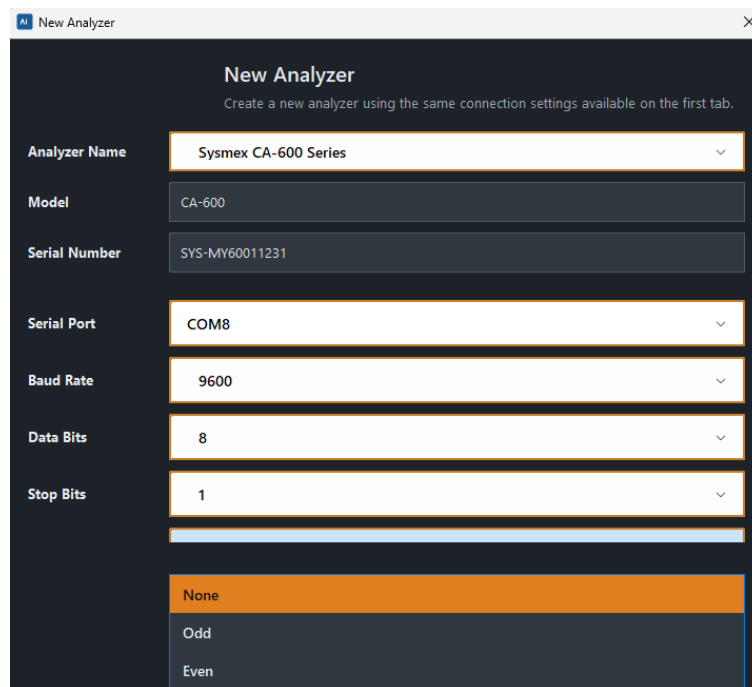
Role	Responsibility
Laboratory operator	Confirm analyzer readiness, transmit test data, review the Logs tab and verify results before release.
LIS/interface administrator	Register the analyzer, select the approved COM port, maintain mappings and investigate processing warnings.
Quality officer/supervisor	Approve configuration, review verification evidence, authorize go-live and control this SOP.

3. Required items

- Sysmex CA-600 Series analyzer and approved serial cable/adaptor.
- Windows workstation running the current Analyzer Interface build.
- Available COM port and permission to restart the interface runtime.
- Approved LIS parameter mappings for PT I, PT INR and other reported assays.

4. Analyzer registration

1. **Open Analyzer Interface.** Go to the Analyzers tab and select New Analyzer.
2. **Choose the analyzer.** Select Sysmex CA-600 Series from the analyzer list.
3. **Enter identity details.** Enter the local model designation and the analyzer serial number.
4. **Select the COM port.** Choose the Windows COM port physically connected to the CA-600.
5. **Verify other settings.** Specify baud rate, data bits, stop bit and parity for example.
6. **Create the analyzer.** Confirm creation and verify that the serial listener starts under the new machine ID.
7. **Restart if required.** Restart the application/runtime if the listener was already running or the COM port was previously occupied.



New Analyzer
Create a new analyzer using the same connection settings available on the first tab.

Analyzer Name: Sysmex CA-600 Series

Model: CA-600

Serial Number: SYS-MY60011231

Serial Port: COM8

Baud Rate: 9600

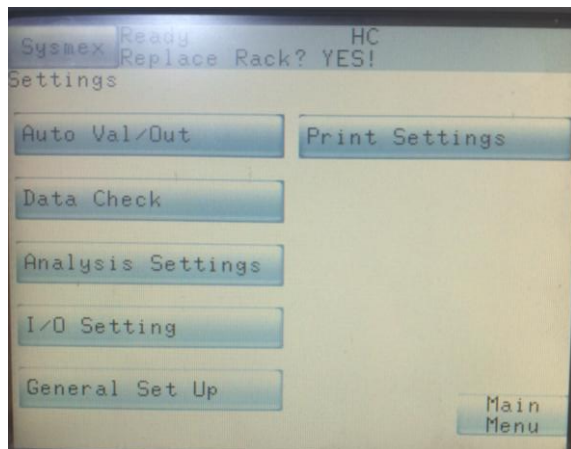
Data Bits: 8

Stop Bits: 1

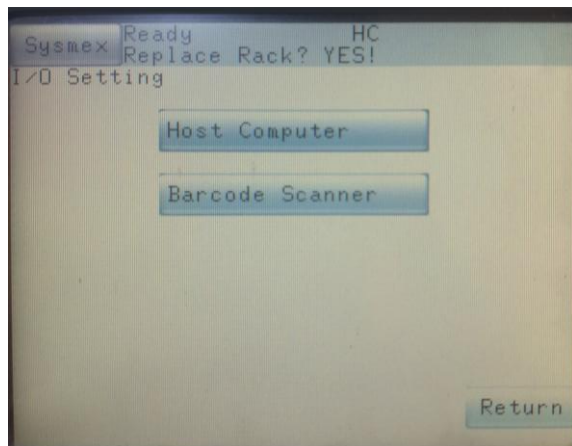
None
Odd
Even

5. Setting up the Sysmex CA-600

Select Main **Menu** -> **Settings**

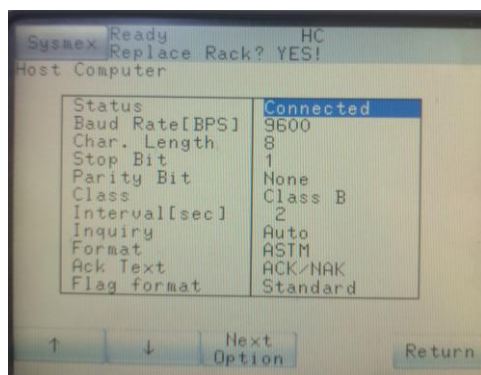


Click the **IO Settings** -> **Host Computer**



Select the Right **Baud Rate** | **Char Length (Data bits)** | **Stop Bit** | **Parity**.

They should resemble the settings in Step 4.



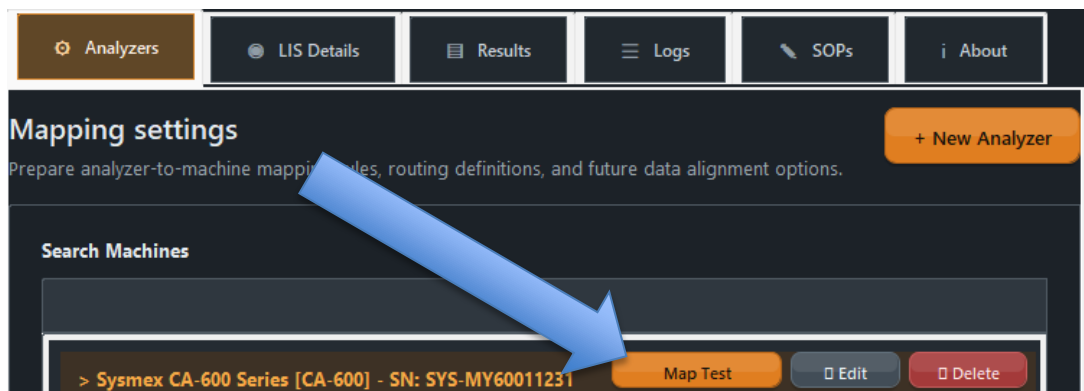
6. Verified CA-600 example Results

Patient ID	Parameter	Result	Units	Flag
25255	PT I	10.2	sec	N
25255	PT INR	1.02	INR	N

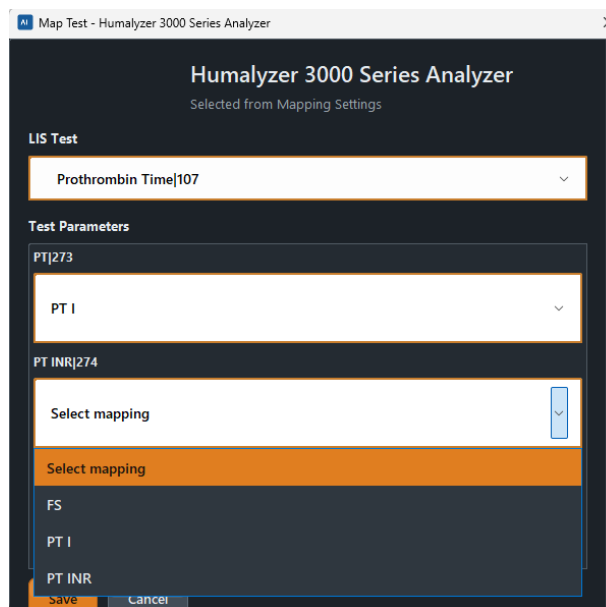
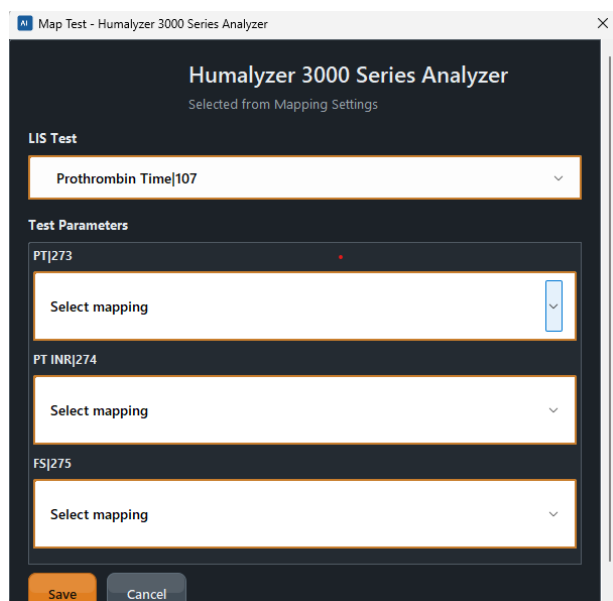
Example identifier interpretation: ^^041^PT I^100^5 -> PT I; ^^044^PT INR^100^5 -> PT INR.

7. Parameter mapping

1. **After setting up the analyzer, transmit a verification sample.** Confirm PT I and PT INR appear in the learned parameter list.
2. **Open mappings.** Select the registered CA-600 and open its parameter mapping view.



3. **Map each parameter.** Associate every analyzer parameter with the approved LIS test/measure code.



4. **Verify units.** Confirm sec and INR are appropriate for the mapped LIS measures and save.
5. **Re-test.** Before running a test **Login** to <http://lims.moh.gov/>, **create a test request**, click **Analyze**, copy the **Machine Id** from the **LIS** and enter it as **ID** in the Sysmex CA-600 Analyzer.

8. Troubleshooting

Observation	Likely cause	Corrective action
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Observation	Likely cause	Corrective action
No connection message	Wrong COM port, port already open, cable/adapter issue	Confirm Device Manager port, close competing software, reseal cable and restart runtime.
No complete transmission log	No bytes received or pauses exceed expected session behavior	Confirm analyzer send settings and cable; watch for any connection/error logs.
Patient ID incorrect	Unexpected order-field layout.	Ensure the machine Id from the LIS in to ID field
Parameter saved as wrong code	Mapping error	Correct the analyzer-to-LIS mapping and repeat controlled verification.
No validated results	Unsupported/partial message or missing required fields	Review the complete buffer and fallback logs; do not infer missing data.