

ADP100CFR

CATALOGUE 2024-25



ADP100CFR **High Speed Automatic Polarimeter** **Dual Wavelength**

SALIENT FEATURES

- ◆ GMP / GLP / FDA 21CFR PART 11
- ◆ Window Operating System
- ◆ Inbuilt Software, No need Separate PC
- ◆ State - of - Art Control Technology
- ◆ Dual Wavelength Polarimeter
- ◆ 3 Decimal point Precision
- ◆ 16GB data Storage
- ◆ Internal Peltier Temperature Control
- ◆ Working Wavelength 546 & 589 nm
- ◆ 8" Colour Touch Screen Display
- ◆ Multipoint Automatic Calibration
- ◆ Optical Rotation, Specific Rotation,
- ◆ Sugar, Concentration, User Define

About 21CFR Part 11

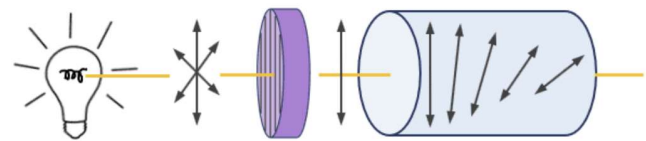
21CFR Part 11 defines the requirements for submitting documentation in electronic form and the criteria for approved electronic signatures

About Optical Rotation

"When plane-polarized light passes through an optically active substance, the plane of polarization undergoes rotation by an amount specifically related to the substance it traverses.



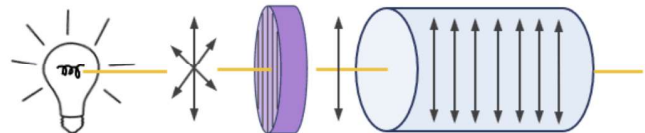
E-Catalogue



Light Source

Polarizer

Optically active



Light Source

Polarizer

Optically Inactive

ADP100CFR

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High Speed Automatic Polarimeter

HSN Code : 90275030

MODEL	ADP100CFR
Make	LABMAN
Measuring Mode	Optical Rotation, Specific Rotation, Sugar. Concentration, User Define
Measuring range	$\pm 90^\circ$ (Optical Rotation) $\pm 259^\circ Z$ (Sugar)
Frequently Used Method	300
Light Source	Tungsten Halogen Lamp (20V)
Operational Wavelength	546 & 589nm
Minimum reading	0.001°
Accuracy	$\pm 0.004^\circ$
Repeatability	$\pm 0.002^\circ$
Operation System	Windows
Software	In Built
Min. transmission of samples	0.1%
Response Speed	8° /S
Measurement time	6 times / 26s
Sample temperature control	Yes
Temperature Control mode	Peltier(In-Built)
Temperature Control range	10°C-50°C
Temperature Control accuracy	$\pm 0.2^\circ C$
Display	8-inch colour Touchscreen
Calibration Method	Multipoint - Automatic Calibration
Memory	16GB Database
Compliance with Regulations	GMP / GLP / FDA 21CFR PART 11
Length of Test Tube	100mm & 200mm
Test tubes	200mm 100mm(regular) 100mm(temp control)
Interface	USB Keyboard / Mouse / VGA / Ethernet / Optical wireless card for internet access
Packing Dimension (LxWxH)	860 x 510 x 470mm
Weight	36kg

SPECIFICATIONS

★ Specifications are subject to change without notice.

STANDARD ACCESSORIES : Main Instrument, 100mm Glass Test Tube, 200mm Glass Test Tube, Injection With Syringe, Fuse, Power Cable, Test Tube Accessories, Peltier Tube Accessories, Test Tube Cleaning Brush, Peltier Cleaning Brush, Touch Pen, Test Certificate

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ADP100CFR - Dual Wavelength High Speed Automatic Polarimeter Function & Features

Export test record

Type of export file: PDF EXCEL

Path to export file: Local U Disk FTP

Buttons:

Export test record

Test report

Sample Information

Test number: 00000092 Sample name: test
Tester: Debug Date: 05-01-2021

Test method

Instrument name: Polarimeter Instrument number: 811520040026
User mode: GMP Test mode: a
Cell length: 200 mm Wavelength: 589 nm
Test times: 0

Test result

No.	Time	Temp	a
1	13:50:17	24.5	1.021

Test report

Sign test report

Password:

Reason: Confirm Check Approve

Description:

Buttons:

Electronic signature

Set up TCP transmission

Ip address: Port:

Send data to tcp server automatically Type: Text Xml

Set up UDP transmission

Ip address: Port:

Send data to udp server automatically Type: Text Xml

Set up Rs232 transmission

Send data to Rs232 automatically Type: Text Xml

Buttons:

Data transmission

New user

Name:

Password:

Description:

Group:

Enable status:

Login status:

Use Model:

Buttons:

Create a new user

New alarm

Alarm name:

Range of measurement alarm

Min: Max: Max of std:

Range of transmittance alarm

Min: % Max: %

Range of temperature alarm

Min: °C Max: °C

Use Model:

Buttons:

Create a new alarm

Minimum length: characters Valid date: days

History management times:

After logging in with the initial password, the password must be changed

Password must meet complexity requirements

Buttons:

Password policy

Report Parameters

No.	Enable	Field name	Null	Repeatable	Edit
1	<input checked="" type="checkbox"/>	Sample name	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Buttons:

Report Parameters

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ADP100CFR - Dual Wavelength High Speed Automatic Polarimeter Function & Features

Automatic polarimeter 22-09-2020 09:39:48

Self-checking

Start counts: 1, Test counts: 1, Error counts: 0

Checking result Progress:

No	Item	Result	Status
1	user database	Database opened successfully	✓
2	record database	Database opened successfully	✓
3	audit database	Database opened successfully	✓
4	delete database	Database opened successfully	✓
5	Serial port	Serial port opened successfully	✓
6	Temperature controller	Temp: 22.8	✓
7	High voltage	value 1: 352 value 2: 387	✓
8	Code wheel	value 1: 00096615 value 2: 00985902	✓
9	Motor	normal	✓

Self-checking

Automatic polarimeter 22-09-2020 09:40:14

User login

Admin

Login

User Login

Automatic polarimeter 22-09-2020 09:40:40

Function menu

Debug, Administrator, ChangePw, ChangeUser, Lock, Exit

Test, Data, User, Method, Alarm, Setting, Audit, Help

Function Menu

Automatic polarimeter 22-09-2020 09:40:53

Change password

old password:

new password:

Enter new password again:

OK, Cancel

Change Password

Automatic polarimeter 22-09-2020 09:50:42

SampleTest DynamicTest InstrumentStatus AlarmSettings Calibration

GMP Wavelength: 589 nm Cell length: 100 mm

α 34.575

α_1 : 34.575 α_2 : 34.575

α_3 : 34.575 α_4 : 34.575

α_5 : 34.576 α_6 : 34.575

Average: 34.575 Std: 0.000

0.01% 0.1% 1% 10% 100%

Transmittance:

Timer: 00:00:32 Preset temp: 20.0 °C Sample temp: 23.0 °C

Measurement results in GMP mode

Automatic polarimeter 22-09-2020 09:53:28

SampleTest DynamicTest InstrumentStatus AlarmSettings Calibration

Map Table

No	Date Time	Temperature	Optical rotation
1	22-09-2020 09:52:08	23.1	34.575
2	22-09-2020 09:52:18	23.1	34.575
3	22-09-2020 09:52:28	23.1	34.574
4	22-09-2020 09:52:38	23.1	34.574
5	22-09-2020 09:52:48	23.1	34.574
6	22-09-2020 09:52:58	23.2	34.575
7	22-09-2020 09:53:08	23.1	34.574
8	22-09-2020 09:53:18	23.1	34.575

Measurement results in dynamic mode

Automatic polarimeter 22-09-2020 10:03:23

SampleTest DynamicTest InstrumentStatus AlarmSettings Calibration

Range of measurement alarm

Min: -89.99900 Max: 88.99900 Max of std: 0.005

Range of transmittance alarm

Min: 0.05 % Max: 100 %

Range of temperature alarm

Min: 10.0 °C Max: 50.0 °C

Use alarm: Enable alarm Enable screenshot Save

Alarm Settings

Automatic polarimeter 22-09-2020 10:04:38

SampleTest DynamicTest InstrumentStatus AlarmSettings Calibration

GMP Wavelength: 589 nm Cell length: 100 mm

α Testing

Alarm: Test Value: 34.569 > Max: 20.00000

Continue Remeasure Stop

Timer: 00:00:08 Preset temp: 20.0 °C Sample temp: 21.0 °C

0.01% 0.1% 1% 10% 100%

Transmittance:

Warning message