BioSystems Diagnostics Pvt. Ltd., A4, SIPCOT Industrial Park, Irungattukottai, Thandalam Village, Sriperumbudur - 602105. Ph: +91 -44 - 30341911 / 12/ 13/14 Email: customersupport@biosystems.in Website: www.biosystems.in CIN - U29297TN2003PTC051492



## **BA200** – Fully Auto Biochemistry Analyser

Installation Qualification Certificate

For

**Xtra care Diagnostics** 

Chembur

**BioSystems Diagnostics Pvt. Ltd** 

**ISO 13485** 

Corporate Office:



## **CERTIFICATE OF INSTALLATION**

Instrument Name :BA200 Fully Auto Biochemistry AnalyzerSerial Number :832001188Customer :Xtra care Diagnostics<br/>Next to Safal Ganga, Opposite Shagun Lawans,

R.C.Marg, Chembur, Mumbai-400074

The undersigned performer certifies that the installation Qualification Protocol has been successfully completed for the instrument stated above.

	SDAGNUSTE
Engineer	A. particular system
Signature	
Name	: Mr. Pranav Ramesh Dudwadkar
Designation	: Senior Service Engineer
Company	: BioSystems Diagnostics Pvt. Ltd.,

Customer Signature Name Designation Company

: Dr. Rishi Mehta(MD) on : Lab In Charge : Xtra care Diagnostics

BioSystems Diagnostics Pvt. Ltd., A4, SIPCOT Industrial Park, Irungattukottai, Thandalam Village, Sriperumbudur - 602105. Ph: +91 -44 - 30341911 / 12/ 13/14 Email: customersupport@biosystems.in Website: www.biosystems.in CIN - U29297TN2003PTC051492



## **INSTALLATION REPORT**

Customer Name	: Xtra care Diagnostics
Department	: Bio-chemistry
Contact Person	: Dr. Rishi Mehta (MD)
Instrument Model	: BA200
Serial Number	: 832001188
Date of Installation	: 3-3-2022

The System was installed along with the necessary accessories. All basic requirements and adjustments were checked and are found to be satisfactory Preliminary customer training was provided and standardization of all parameters was done. The Instrument is found to be working satisfactorily.

Corporate Office:



### **INSTRUMENT SETUP :**

- > Instrument and computer installed
- Printer Installed
- User software 5.4.2.0 installed
- > All necessary cable connections given

### **OPERATION INSPECTION :**

- > No air bubbles found in the Tubing
- > Temperature of the Needles/Reaction & Rotor Chamber are within range
- ➢ No unusual noises produced in the system ➢ Warm up procedure within time limit
- > Internal Dosing of all Needle's were fine
- External Dosing of all Wash Station is perfect
- > Conditioning of Machine with Air/Wash solution/Distilled water done

For Biosystems Diagnostics Pvt. Ltd



Mr. Pranav Ramesh Dudwadkar Senior Service Engineer



## **INSTALLATION QUALIFICATION**

Customer Name	: Xtra care Diagnostics
Address	<ul> <li>Xtra care Diagnostics</li> <li>Next to Safal Ganga, Opposite Shagun Lawans,</li> <li>R.C.Marg, Chembur, Mumbai-400074</li> </ul>
Instrument Model	: BA200
Serial No.	: 832001188

### **Operational requirement for the Instrument:**

Requirement	Acceptable Range	Observed Range
Input Voltage	220 <u>+</u> 10 V	231 V
Line Frequency	50 or 60 Hz	50 Hz
Ambient Temperature	18 – 30 deg. C	25 deg. C
Distill Water	Type II NCCLS	Available

For Biosystems Diagnostics Pvt. Ltd



Mr. Pranav Ramesh Dudwadkar Senior Service Engineer



## **BA200 - Fully Auto Biochemistry Analyzer**

## **Operational Qualification**

## For

**Xtra care Diagnostics** 

Chembur

**BioSystems Diagnostics Pvt. Ltd** 

Corporate Office:



# BA200 – Fully Auto Biochemistry Analyzer

#### OPERATIONAL QUALIFICATION

- 1. System Performance check procedures.
- 2. System operational certificate.

Corporate Office



## **CERTIFICATE OF OPERATION**

Instrument Name	: BA200 Fully Auto Biochemistry Analyzer
Serial Number	: 832001188
Customer	: Xtra care Diagnostics

The undersigned performer certifies that the Operational Qualification Protocol has been successfully completed for the instrument stated above.

Engineer Signature Name Designation Company

CHENNA for A Porty

Mr. Pranav Ramesh Dudwadkar
Senior Service Engineer
BioSystems Diagnostics Pvt. Ltd

Customer Signature Name Designation Company

: Dr. Rishi Mehta (MD): Lab In Charge: Xtra care Diagnostics

Corporate Office:



### SYSTEM PERFORMANCE CHECK PROCEDURE

SYTEM CHECK	PERFORMANCE	
LED Photometric Check	Done	
Warm Up	Done	
Mechanical Adjustments	Done	
Temperature Check	Done	
Internal/External Dosing Check	Done	

(YA

Customer Signature:



## **OPERATIONAL QUALIFICATION**

#### System Certification:

Study data has determined that the System described in this document either meets all criteria outlined in this Operational Qualification Protocol, or exceptional conditions have been identified and documentation included. Exceptional conditions, if any have been addressed. The system is ready for specified usage.

Protocol Performed By:

BioSystems Diagnostics Pvt Ltd

Name : Mr. Pranav Ramesh Dudwadkar

Title : Senior Service Engineer

Company: Biosystems Diagnostics Pvt Ltd

Customer Authorization:

tor A. Pauge Contential ENGINEER SIGNATURE DATE: 05 04 2022 Xtra care Diagnostics

Name: Dr. Rishi Mehta (MD)

Title : Lab In Charge

DATE: 65 04 2022



## **BA200 - Fully Auto Bio Chemistry Analyzer**

**Performance Qualification** 

For

**Xtra care Diagnostics** 

Chembur

**BioSystems Diagnostics Pvt. Ltd** 

Corporate Office:



## **BA200 Fully Auto Biochemistry Analyzer**

### **PERFORMANCE QUALIFICATION:**

The following parameters were checked and found to be within acceptable limits.

Parameter	Check
Vertical Motors – Sample and reagent in Home	Done
Polar Motors – Sample and reagent in Home	Done
Reaction Rotor in home	Done
Sample and Reagent rotor in Home	Done
Ceramic Dispensing pump – Sample and reagent in Home	Done
Optics Initialization: Ok	Done
Peltier cells and drivers test	Done
Rotor Peltier and Sample Reagent Rotor peltier driver test: Ok	Done
Temperature system initialized	Done
LED test: ok	Done
Hardware completely initialized	Done

BioSystems Diagnostics Pvt. Ltd., A4, SIPCOT Industrial Park, Irungattukottai, Thandalam Village, Sriperumbudur - 602105. Ph: +91 -44 - 30341911 / 12/ 13/14 Email: customersupport@biosystems.in Website: www.biosystems.in CIN - U29297TN2003PTC051492



### **CERTIFICATE OF PERFORMANCE**

Instrument Name	•	BA200 Fully Auto Biochemistry Analyzer
Serial Number	:	832001188
Customer	:	Xtra care Diagnostics

The undersigned performer certifies that the Operational Qualification Protocol has been successfully completed for the instrument stated above.

Engineer

Signature Name Designation Company

for A.

: Mr. Pranav Ramesh Dudwadkar

: Senior Service Engineer

:

: BioSystems Diagnostics Pvt Ltd.,

Customer

Signature Name Designation Company

: Dr. Rishi Mehta (MD): Lab In Charge: Xtra care Diagnostics

Corporate Office:

**BioSystems Diagnostics Pvt. Ltd.,** A4, SIPCOT Industrial Park, Irungattukottai, Thandalam Village, Sriperumbudur - 602105. Ph: +91 -44 - 30341911 / 12/ 13/14 Email: customersupport@biosystems.in Website: www.biosystems.in CIN - U29297TN2003PTC051492



Date: 03/03/2022

#### CALIBRATION CERTIFICATE OF BA200

CUSTOMER NAME - XTRA CARE DIAGNOSTICS, CHEMBUR.

Serial Number = 832001188 User Software = 5.4.2.0 Initialization Motor Vertical Motors – Sample and reagent in Home Polar Motors – Sample and reagent in Home Reaction Rotor in home Sample and Reagent rotor in Home Ceramic Dispensing pump – Sample and reagent in Home Optics Initialization: Ok Peltier cells and drivers test Rotor Peltier and Sample Reagent Rotor peltier driver test: Ok Temperature system initialized LED test: ok Hardware completely initialized

Corporate Office:

BioSystems Diagnostics Pvt. Ltd., A4, SIPCOT Industrial Park, Irungattukottai,

Thandalam Village, Sriperumbudur - 602105. Ph: +91 -44 - 30341911 / 12/ 13/14 Email: customersupport@biosystems.in Website: www.biosystems.in CIN - U29297TN2003PTC051492



Parameters	Current value	Minimum	Maximum
Reading reference Position - Well 1	7893	7860	7905
Thermal adjustment of reaction rotor	34	37	39
Thermal adjustment of Wash station	49	42	50
Thermal adjustment of Sample & Reagent Probe	37	36	39
Photometric Dark Current Adjustment	3923	3300	4500
Main Photo Diode Counts 340NM	899387	600000	950000
Main Photo Diode Counts 405NM	668826	850000	950000
Main Photo Diode Counts 505NM	588264	850000	950000
Main Photo Diode Counts 535NM	788705	850000	950000
Main Photo Diode Counts 560NM	733502	420000	950000
Main Photo Diode Counts 600NM	742420	750000	950000
Main Photo Diode Counts 635NM	681819	850000	950000
Main Photo Diode Counts 670NM	664388	450000	950000

#### Next calibration due on: 2/3/2023

For BIOSYSTEMS DIAGNOSTICS PVT. LTD.

Corporate Office:



Registered office: **BioSystems Diagnostics Pvt. Ltd.,** A4, SIPCOT Industrial Park, Irungattukottai, Tamil Nadu - 602105. India Ph: +91 -44 - 30341911 / 12/ 13/14 Email: support@biosystems.in CIN - U29297TN2003PTC051492

Date: 03/03/2023

#### **CALIBRATION CERTIFICATE OF BA200**

#### CUSTOMER NAME – Xtra Care Diagnostics

Serial Number = 832001188User Software = V 5.4.2 Initialization Motor Vertical Motors – S /R1 /R2 in Home Polar Motors – S /R1 /R2 in Home Reaction Rotor in home Sample /Reagent rotor in Home Ceramic Dispensing pump – S/ R1 /R2 in Home Optics Initialization: Ok Auto adjustment of the probe is done Peltier cells and drivers test Rotor Peltier/ Reagent Rotor peltier driver test: Ok Temperature system initialized LED test: ok Hardware completely initialized

Parameters	Current value	Minimum	Maximum
Reading reference Position - Well 1	7896	7860	7905
Washing Solution Tank 0	0	-5	5
Washing Solution Tank 50	46	40	60
Washing Solution Tank 100	98	95	105
Waste Tank 0	-1	-5	5
Waste Tank 50	43	40	60
Waste Tank 100	100	95	105
Thermal adjustment of reaction rotor	37.0	36.0	39.0
Thermal adjustment of Wash station	44.9	44	50
Thermal adjustment of reagent tip 1	37.0	36	39



Registered office: **BioSystems Diagnostics Pvt. Ltd.,** A4, SIPCOT Industrial Park, Irungattukottai, Tamil Nadu - 602105. India Ph: +91 -44 - 30341911 / 12/ 13/14 Email: support@biosystems.in CIN - U29297TN2003PTC051492

Thermal adjustment of reagent tip 2	37.0	36	39
Photometric Dark Current	3885	3941	4500
Adjustment	3003	3941	4300
Main Photo Diode Counts 340NM	8,82,490	2,16,086	950000
Main Photo Diode Counts 405NM	8,99,288	7,40,174	950000
Main Photo Diode Counts 505NM	9,01,338	7,03,853	950000
Main Photo Diode Counts 535NM	8,89,214	5,97,627	950000
Main Photo Diode Counts 560NM	8,99,482	7,10,590	950000
Main Photo Diode Counts 600NM	9,01,891	5,82,890	950000
Main Photo Diode Counts 635NM	9,00,649	5,91,854	950000
Main Photo Diode Counts 670NM	8,99,062	7,39,773	950000

Next calibration due on: 02/03/2024

For BIOSYSTEMS DIAGNOSTICS PVT. LTD.,

KRUNAL GORDHANBHAI MADHU DN: cn=KRUNAL GORDHANBHAI MADHU DA: cn=KRUNAL GORDHANBHAI MADHU DA: cn=KRUNAL GORDHANBHAI MADHU Date: 2023.05.25 16:50:33 +05'30'

Authorized Signatory



WORLD C

FILIN

First Line Second Line First Line Second Line

QC(Name-Lot)	Test	Target	Value SD Value	QC Range	Result	Teet Det
normalyte	GLUC				92	Test Date
normalyte	ALB	94 3.3	10	75 ~ 113 2.7 ~ 3.9	3.5	10-08-2023
<ul> <li>normalyte</li> </ul>	UREA	3.3	0.3 4	$2.7 \sim 3.9$ $25 \sim 41$	37	10-08-2023
normalyte	TP	5.49	0.69	$4.11 \sim 6.87$	5.02	10-08-2023
normalyte	SGPT	48	5	38~58	54	10-08-2023 10-08-2023
ICLASS normalyte	CREAT	1.20	0.15	0.90~1.50	1.19	10-08-2023
normalyte	SGOT	41	4	33~49	44	10-08-2023
ormalyte	UA	4.5	0.5	3.6~5.4	5.1	10-08-2023
malyte	HDL - D	44	5	35~53	46	10-08-2023
nalyte	GGT	26	5	17~35	28	10-08-2023
normalyte	ALP	100	13	75~125	105	10-08-2023
normalyte	CALCIUM	7.80	0.60	6.60 ~ 9.00	9.71	10-08-2023
normalyte normalyte	CHOL	136	10	116~156	133	10-08-2023
	PHOS	3.3	0.3	2.6~3.9	3.4	10-08-2023
normalyte	TGL	92	7	78~106	92	10-08-2023
normalyte	BIL D	0.97	0.10	0.77~1.17	0.80	10-08-2023
normalyte	TBIL	1.72	0.17	1.38~2.06	1.90	10-08-2023
normalyte	IRON	85.00	11.00	63.00 ~ 107.00	108.77	10-08-2023
patholyte-14123062	GLUC	306	31	244 ~ 368		10-08-2023
patholyte-14123062	ALB	5.1	0.5	4.1 ~ 6.2	290	10-08-2023
patholyte14123062	UREA	137	14	4.1~0.2 110~164	5.1	10-08-2023
patholyte14123062	TP	8.46	0.85		113	10-08-2023
patholyte-14123062	SGPT	140	14	6.76~10.16	7.36	10-08-2023
patholyte-14123062	CREAT	4.55		112~168	136	10-08-2023
patholyte14123062	SGOT	182	0.55	3.45 ~ 5.65	4.36	10-08-2023
	UA	9.3	18	146~218	186	10-08-2023
	IDL - D		0.9	7.4~11.2	9.5	
	GT GT	65	7	52~78		10-08-2023
		93	14	65~121	63	10-08-202
	LP	225	23		93	10-08-202
	ALCIUM	12.50	1.25	180~270	221	10-08-202
patholyte-14123062 Cl	HOL	221		10.00 ~ 15.00	13.17	10-08-202
patholyte-14123062 PH	IOS	9.8	22	177~265	210	10-08-202
patholyte-14123062 TC			1.1	7.6~12.0		10-08-202
patholyte-14123062 BII		205	21	163~247	6.8	10-08-202
nothal 111000		2.35	0.25	105 24/	192	10-08-202
nothal disease	「 「 「 」 「 」 「 」 「 」 」 「 」 」 「 」 」 」 」 」	6.09	0.61	1.85~2.85	2.33	10-08-202
patholyte14123062 IRC	)N	151.00		4.87~7.31	5.75	
2012년 1월 1일 - 2월 19일 - 2월 19일 1월 19일 - 2월 1 1월 19일 - 2월 1		101.00	30.00	91.00~211.00	224.23	10-08-202
	AND AND AND AND			-11.00	224.23	10-08-202
	and and the second					

# First Line

Second Line

# 05-08-202

n p pa pa pat pati path path pathe patho patho pathol patholy patholy patholy tholyt patholyte

SFILING

WORLD CLASS

	reat	Targe	t Value SD Value	QC Range	Result	Test Date	C.
QC(Name normalyte normalyte normalyte normalyte normalyte normalyte normalyte normalyte normalyte normalyte normalyte rmalyte alyte alyte rmalyte solyte blyte blyte blyte te te	GLUC ALB UREA TP SGPT CREAT SGOT UA HDL - D GGT ALP CALCIUM CHOL PHOS TGL BIL D TBIL IRON GLUC ALB UREA TP SGPT CREAT SGOT UA HDL - D GGT	Targe           94           3.3           5.49           48           1.20           41           4.5           44           26           100           7.80           136           3.3           92           0.97           1.72           85.000           270           4.2           120           7.27           105           4.17           111           6.4           56           79	$ \begin{array}{c} 10\\ 0.3\\ 4\\ 0.69\\ 5\\ 0.15\\ 4\\ 0.5\\ 5\\ 5\\ 13\\ 0.60\\ 10\\ 0.3\\ 7\\ 0.10\\ 0.17\\ 11.00\\ 27\\ 0.4\\ 12\\ 0.75\\ 13\\ 0.42\\ 14\\ 0.7\\ 7\\ \end{array} $	$75 \sim 113$ $2.7 \sim 3.9$ $25 \sim 41$ $4.11 \sim 6.87$ $38 \sim 58$ $0.90 \sim 1.50$ $33 \sim 49$ $3.6 \sim 5.4$ $35 \sim 53$ $17 \sim 35$ $75 \sim 125$ $6.60 \sim 9.00$ $116 \sim 156$ $2.6 \sim 3.9$ $78 \sim 106$ $0.77 \sim 1.17$ $1.38 \sim 2.06$ $63.00 \sim 107.00$ $216 \sim 324$ $3.4 \sim 5.0$ $96 \sim 144$ $5.77 \sim 8.77$ $79 \sim 131$ $3.33 \sim 5.01$ $83 \sim 139$ $5.1 \sim 7.7$ $42 \sim 70$	93 3.5 40 4.75 50 1.26 46 4.8 45 30 101 8.00 136 3.2 87 0.78 1.79 49.21 265 4.4 122 6.06 110 4.40 119 7.0 58	Test Date 05-08-2023 05-08-2	3333333333
te e	ALP CALCIUM CHOL PHOS	337 10.30 172	12 25 0.80 22	55 ~ 103 286 ~ 388 8.70 ~ 11.90 129 ~ 215	85 352 11.18	05-08-202 05-08-202 05-08-202 05-08-202	23 23 23
	TGL BIL D	7.9 171 2.05 4.50	0.8 21 0.21 0.57	$6.3 \sim 9.4$ $128 \sim 214$ $1.63 \sim 2.47$ $3.36 \sim 5.64$	170 5.4 171 1.99 4.14	05-08-202 05-08-202 05-08-20 05-08-20 05-08-20	23 23 23 23 23

ath

LD CLAS



# First Line

### Second Line

03-08-

QC(Name-Lot)	Test	Target Value SD Value		QC Range	Result 97	Test Date
normalyte			10	75~113		03-08-2023
normalyte	ALB	94 3.3	0.3	2.7~3.9	3.4	03-08-2023
normalyte	UREA	33	4	25~41	41	03-08-2023
normalyte	TP	5.49	0.69	4.11~6.87	4.96	03-08-202
normalyte	SGPT	48	5	38~58	46	03-08-202
normalyte	CREAT	1.20	0.15	$0.90 \sim 1.50$	1.37	03-08-202
normalyte	SGOT	41	4	33 ~ 49	44	03-08-202
normalyte	UA	4.5	0.5	3.6~5.4	4.9	03-08-202
normalyte	HDL - D	44	5	35~53	45	03-08-202
ormalyte	GGT	26	5	17~35	29	03-08-202
malyte	ALP	100	13	75~125	103	03-08-202
ni alyte	CALCIUM	7.80	0.60	$6.60 \sim 9.00$	8.04	03-08-202
nomalyte	CHOL	136	10	116~156	136	03-08-202
normalyte	PHOS	3.3	0.3	2.6~3.9	6.4	03-08-202
normalyte	TGL	92	7	78~106	81	03-08-20
normalyte	BILD	0.97	0.10	0.77~1.17	0.85	03-08-20
normalyte	TBIL	1.72	0.17	1.38~2.06	1.87	03-08-20
normalyte	IRON	85.00	11.00	63.00 ~ 107.00	86.18	03-08-20
patholyte	GLUC	270	27	216~324	266	03-08-20
patholyte	ALB	4.2	0.4	3.4 ~ 5.0	4.4	03-08-20
patholyte	UREA	120	12	96~144	127	03-08-20
patholyte	TP	7.27	0.75	5.77~8.77	6.42	03-08-20
patholyte	SGPT	105	13	79 ~ 131		03-08-20
patholyte	CREAT	4.17	0.42	3.33 ~ 5.01	106	03-08-20
patholyte	SGOT	111	14	83 ~ 139	4.67	03-08-20
patholyte	UA	6.4	0.7		117	03-08-20
patholyte	HDL - D	56	0.7 7	5.1 ~ 7.7	7.3	03-08-20
patholyte	GGT	79	12	42~70	58	03-08-20
patholyte	ALP	337	25	55~103	84	03-08-20
oatholyte	CALCIUM	10.30	0.80	286~388	347	03-08-20
lyte	CHOL	172	22	8.70~11.90	10.85	03-08-20
Daniolyte	PHOS	7.9		129~215	179	03-08-20
patholyte	TGL	171	0.8	6.3 ~ 9.4	8.2	03-08-20
patholyte	BILD	2.05	21	128~214	170	03-08-20
patholyte	TBIL	4.50	0.21	1.63~2.47	2.05	
patholyte	IRON		0.57	3.36~5.64	4.94	03-08-20
		161.00	20.00	121.00 ~ 201.00	188.65	03-08-2( 03-08-2(