

Certificate No. 24PT

24PTP_0104240222

Page 1 of 3

Certificate of Calibration

EQUIPMENT : MONITORS, PHYSIOLOGIC, VITAL SIGNS

ID CODE : PTP03791

MANUFACTURER : WELCH ALLYN

MODEL : CONNEX SPOT MONITOR

SERIAL No. : 100073822020

LOCATION : Check Up Center

SUBMITTED BY : PHYATHAI PHAHOLYOTHIN HOSPITAL

670/1 Phaholyothin Road, Samsen Nai, Phaya Thai, Bangkok 10400

Tel: 02-271-7000 Fax: -

CALIBRATED DATE : 22 APRIL 2024 ISSUE DATE : 30 APRIL 2024

	Usanee
Performed by:	

Approved by :

USANEE CHALONGPHOKSILCHAI

PHUWASIN YIWKIM

This certificate may not be reproduced except in full unless permission for reproduction has been obtained in writing from the calibration.

CONDITION OF THIS RESULT OF TEST

1. REFERENCE STANDARD INSTRUMENT:

MASTER MANUFACTURER MODEL SERIAL NO. CERTIFICATE NO. DUE DATE 7 Jun 2024 Vitalsign Simulator Fluke ProSim8 2541031 23MD777 ATC-140A 12 Jul 2024 Temperature Ametex 561460-00403 WB23062779 Calibrator (Source)

2. THIS CERTIFICATION IS TRACEABLE TO:

- Technology Promotion Association (Thai-Japan)
- N-Health

3. THIS RESULT OF TEST WAS FOUND ACCURATE AS SHOW ON DATE AND PLACE OF TEST ONLY



Certificate No. 24PTP_0104240222

Page 2 of 3

Calibration Report

EQUIPMENT : MONITORS, PHYSIOLOGIC, VITAL SIGNS

ID CODE : PTP03791

MANUFACTURER : WELCH ALLYN

MODEL : CONNEX SPOT MONITOR

SERIAL No. : 100073822020

DATE OF CALIBRATION : 22 APRIL 2024

ENVIRONMENT : TEMPERATURE 25 °C

RELATIVE HUMIDITY 55 %

PROCEDURE USED:

This instrument was calibration by comparison with standard

MEASURMENT RESULT:

/	Without Adjustment		Before Adjustment		After Adjustment
---	--------------------	--	-------------------	--	------------------

Systolic				
Standard Setting	UUC* Reading	Error	% Error	Uncertainty
(mmHg)	(mmHg)	(mmHg)	(%)	(mmHg)
60	61.00	1.00	1.67	± 0.9238
120	118.00	-2.00	-1.67	± 1.2702
200	199.00	-1.00	-0.50	± 1.7321

Diastolic				
Standard Setting	UUC* Reading	Error	% Error	Uncertainty
(mmHg)	(mmHg)	(mmHg)	(%)	(mmHg)
30	35.00	5.00	16.67	± 0.7506
80	81.00	1.00	1.25	± 1.0393
150	144.00	-6.00	-4.00	± 1.4434

Heart Rate					
Standard Setting	UUC* Reading	Error	% Error	Uncertainty	
(BPM)	(BPM)	(BPM)	(%)	(BPM)	
60	60.00	0.00	0.00	± 0.0150	
80	80.00	0.00	0.00	± 0.0460	
120	120.00	0.00	0.00	± 0.0460	

FI-BME-NHS-CP-007/1 Rev.03 Page 2/3 Issued Date 20/07/2023



Certificate No. 24PTP_0104240222

Page 3 of 3

Calibration Report

EQUIPMENT : MONITORS, PHYSIOLOGIC, VITAL SIGNS

ID CODE : PTP03791

SERIAL No. : 100073822020

%Spo2				
Standard Setting	UUC* Reading	Error	% Error	Uncertainty
(%SPO ₂)	(%SPO ₂)	(%SPO ₂)	(%)	(%SPO ₂)
90	90.00	0.00	0.00	± 0.1039
96	96.00	0.00	0.00	± 0.1109
100	100.00	0.00	0.00	± 0.1155

Temperature				
UUC* Setting	Standard Reading	Error	% Error	Uncertainty
(°C)	(°C)	(°C)	(%)	(°C)
35	35.00	0.00	0.00	± 0.3100
37	37.10	0.10	0.27	± 0.3100
39	39.10	0.10	0.26	± 0.3100

UUC*: Unit Under Calibration

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%

FI-BME-NHS-CP-007/1 Rev.03 Page 3/3 Issued Date 20/07/2023