

# Form B03 Scheduled Maintenance Work Order

CLOSE

Quantum Medical Solutions sdn bhd  
transcending boundaries, transforming life  
Format Ref - QMS/TSD-022 Rev 01

Work Order No.	PWO365653	Schedule Month	June 2018
Work Order Date	01/06/2018	Completed Date	26/6/18
Clinic Name	Klinik Kesihatan Tanjung Sedili	Clinic Code	JHR048
BE No.	JHR001380	Distict	KOTA TINGGI
BE Category	Bilirubinometers, Laboratory	WO Assigned to	KTABME1
Ownership	<input checked="" type="checkbox"/> Existing Equipment	<input type="checkbox"/> Purchase	<input type="checkbox"/> New
BE Condition	<input checked="" type="checkbox"/> Active	<input type="checkbox"/> BER Proposed	
Work Order Type	<input checked="" type="checkbox"/> Preventive Maintenance (PM)	<input type="checkbox"/> Third Party Calibration (TPC)	
	<input type="checkbox"/> Routine Inspection (RI)	<input type="checkbox"/> Statutory Certification (SC)	

Reschedule Date N/A

## BE Third Party Calibration / Statutory Certification Details

Company Name		Cal / Cert Date	
Contact Number		Cal / Cert Expiry Date	
Action Taken		Manufacturer : DMS	
<input checked="" type="checkbox"/> PM / RT job done as per checklist. Unit tested functioning good & ready to use.		Modal : neobit - plus	
<input type="checkbox"/> Corrective Maintenance / <input type="checkbox"/> Breakdown		Serial No : 831	
BE Sticker Availability : <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> NA			
Remarks : N/A			

## Schedule Maintenance Execution Details

SINo	QMS Engineer / Technician Name	Date	Start Time	End Time
N/A	Stefano	22/6/18	11 <sup>00</sup>	12 <sup>00</sup>

## Customer Remarks

N/A

Engineer / Technician Signature

Name

Date

NOORSHALWANA BINTI LATIP

Biomedical Engineer

Quantum Medical Solutions Sdn Bhd

26/6/18

010.200

Customer Signature

Name

Designation

Date

Seal

26/6/18

GEVELAN ANAK JIHOB

JURUTEKNOLOGI MAKMAL PERUBATAN U29

KLINIK KESIHATAN TANJUNG SEDILI

81910 KOTA TINGGI, JOHOR

For Internal Use

MUHD RAMADHAN BITAMAD IYAH

Biomedical Engineer

Technical Services

Quantum Medical Solutions Sdn Bhd

Tel: +60 12-356 1000

First Verification

QMS Circle Incharge

Final Verification

QMS State Incharge



# KEMENTERIAN KESIHATAN MALAYSIA

MEET Planned Preventive Maintenance Checklist  
Bilirubinometers, Laboratory  
BE CODE : ME-012

CHECKLIST NO: CL-030-000  
REV.000

## PART 1 ASSET DETAILS

WORK ORDER NO ▶ PWD 365 653  
MANUFACTURER ▶ OAS  
FREQUENCY ▶ 6 MONTHLY ( ☒ ) 12 MONTHLY ( )  
BE NO ▶ JHR 001380  
MODEL ▶ Neobil - plus  
PPM HOURS ▶ 1.00

## PART 2 SPECIAL PRECAUTION

If there is evidence of body fluid contamination, submit the device for cleaning and decontamination before inspecting it.  
Wear appropriate Personnel Protection Equipment (PPE) during work.  
Wear grounded electrostatic wristband when handling PCB or electronic components.  
Refer to the safety procedure for additional precautions and guidance as per manufacturer guidelines.  
Make sure the test equipment used are duly calibrated.

## PART 3 TEST APPARATUS

Tick ( ☒ ) where appropriate

NO	ASSET NO	DESCRIPTION	SERIAL NO	CALIBRATION DUE ON
1	TEESA0010	ELECTRICAL SAFETY ANALYZER	3218071	11/8/18

## PART 4 QUALITATIVE TASKS

Tick ( ☒ ) where appropriate

	PASS	FAIL	NA		PASS	FAIL	NA
1 Chassis - verify physical integrity, cleanliness and condition	( <input checked="" type="checkbox"/> )	( )	( )	8 Indicators / Displays -Verify Proper Operation	( <input checked="" type="checkbox"/> )	( )	( )
2 Mount/ Fasteners - verify physical integrity	( <input checked="" type="checkbox"/> )	( )	( )	9 Audible / Visual Alarms - Verify proper Operation, Automatic and Activation	( <input checked="" type="checkbox"/> )	( )	( )
3 Power Cord - verify proper insulation and integrity	( <input checked="" type="checkbox"/> )	( )	( )	10 System Printer - Verify Integrity	( <input checked="" type="checkbox"/> )	( )	( )
4 Strain Relief - verify physical integrity at both ends of line cord	( <input checked="" type="checkbox"/> )	( )	( )	11 Lamp - Verify Integrity	( <input checked="" type="checkbox"/> )	( )	( )
5 Circuit Breaker / Fuses-Verify Integrity of External Circuit Breaker or rating of Fuses	( <input checked="" type="checkbox"/> )	( )	( )	12 Capillary Holder-Verify Physical integrity	( <input checked="" type="checkbox"/> )	( )	( )
6 Fittings/ Connectors - Check all Fittings/ Connectors	( <input checked="" type="checkbox"/> )	( )	( )	13 Interference filter - Check Adjustment	( <input checked="" type="checkbox"/> )	( )	( )
7 Controls /Switches -Verify proper operation of controls	( <input checked="" type="checkbox"/> )	( )	( )	14 Accessories - Verify Physical Integrity and Operation	( <input checked="" type="checkbox"/> )	( )	( )

## PART 5 PREVENTIVE MAINTENANCE TASKS

Tick ( ☒ ) where appropriate

	DONE	NOT DONE **	NA	Notes:
1 Clean the Exterior	( <input checked="" type="checkbox"/> )	( )	( )	* For all Parts, NA is defined as NOT APPLICABLE ** If you have ticked 'NOT DONE', then justify in Part 8 *** Choose Whichever Applicable
2 Inspect / Clean Interior of unit	( <input checked="" type="checkbox"/> )	( )	( )	
3 Battery - Check /Replace ***	( )	( )	( <input checked="" type="checkbox"/> )	

NAME: 0.0 mg/dl  
CONC: 10.40  
HOUR: 0247  
DATE: 10/18/10  
HOUR: 20:00  
DATE: 10/18/10

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Bilirubinometers, Laboratory  
DE CODE : ME-012

WORK ORDER NO. ▶

Tick (✓) where appropriate

## PART 7 ELECTRICAL SAFETY TEST

ELECTRICAL SAFETY TEST, (attach report)

Tick (✓) where appropriate

Standard use :

**Result :**

☒ IEC 60601☐ IEC 61010

☐ IEC 62353

☒ PASS☐ FAIL☐ NA

## PART 8 NOTES

☐

CORRECTIVE MAINTENANCE REQUIRED

☒

## FUNCTIONING

1

NOT FUNCTIONING

WORK ORDER NO ▶

NEXT PPM DATE ► 12/2019.

PPM has been performed in accordance to the checklist and the equipment is functioning to the intended purpose.

**COMPLETED BY:**

DATE : \_\_\_\_\_

**NOORSHALWANA BINTI LATIP**  
Biomedical Engineer  
Quantum Medical Solutions Sdn. Bhd  
012-3962428



### Test Setup

Operator ID :  
Calibration Tech : MOHANA  
Calibration Date : 08/24/2018  
Firmware Version : 2.08.01  
Serial Number : 3218071  
Date & Time : 26/6/2018&11.00AM  
JOB Name :

### DUT Information

Equipment Number : JHR001380  
Serial Number :  
Manufacturer :  
Model :  
Location : KK TG SEDILI  
Other :

### Template Information

Template Name : BILIRUBINOMETER  
Pause after Power ON: NO  
Power ON delay: 2  
Test Speed: NORMAL  
Halt on Test Failure: YES  
Include Time: YES  
Insulation Resistance v 500V  
Multi Enclosure Test : NO

Standard : IEC60601-1-2nd Ed  
Pause before Power ON: NO  
Power OFF delay: 0  
Test Mode: AUTO  
Multi PE Test: NO  
Multi Resstore: WORST/LAST  
Reverse Polarity: YES  
Classification: II

### PLC Configuration-Applied part setup

AP Name AP Type AP Num

### ESA615 Test Results

Test Name	Value	High Limits	Low Limits	Status
Insulation Resistance				P
Mains to Non-Earth Accessible Conductive Par	999 MOhn -	-	-	P
Mains Voltage				P
Live to Neutral	236.9 V -	-	-	P
Equipment Current	0.0 A -	-	-	P
Enclosure Leakage Current				P
Normal Condition	0.6 uA-OPI	100 -	-	P
Open Neutral	0.7 uA-OPI	500 -	-	P
Open Neutral- Reversed Mains	0.7 uA-OPI	500 -	-	P
Normal Condition- Reversed Mains	0.6 uA-OPI	100 -	-	P
Earth Leakage Current				P
Open Neutral	17.8 uA-OI	1000 -	-	P

  
Signature