

## Form B03

## Scheduled Maintenance Work Order



Quantum Medical Solutions sdn bhd  
transcending boundaries, transforming life

Format Ref: - QMS/TSD-022 Rev.01

Work Order No.	PWO365364	Schedule Month	June 2018
Work Order Date	01/06/2018	Completed Date	26/6/18
Clinic Name	Klinik Kesihatan Batu Pahat	Clinic Code	JHR003
BE No.	JHR000011	Distict	BATU PAHAT
BE Category	Photometer, Filter, Manual	WO Assigned to	Farhan
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	
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BE Third Party Calibration / Statutory Certification Details			
Company Name	NA	Cal / Cert Date	NA
Contact Number		Cal / Cert Expiry Date	
<b>Action Taken</b> <input checked="" type="checkbox"/> PM / RI job done as per checklist. Unit tested functioning good & ready to use. Manufacturer: NA <input type="checkbox"/> Corrective Maintenance / <input type="checkbox"/> Breakdown Modal: NA BE Sticker Availability: <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> NA Serial No: NA Remarks:			

Schedule Maintenance Execution Details				
SI No	QMS Engineer / Technician Name	Date	Start Time	End Time
	Farhan	26/6/18	1330	1400

Customer Remarks	NA
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Engineer / Technician Signature Name: Date: 26/6/18 MOHD NAJIB FARHAN B. ISMAIL BIOMEDICAL ENGINEER (012-396 7048) QUANTUM MEDICAL SOLUTIONS SDN. BHD.	Customer Signature Name: Designation: AFIZA BINTI ABD. AZIZ Date: 8/7/2018 Seal:
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For Internal Use

QUANTUM MEDICAL SOLUTIONS  
 RAZIHA BINTI MOHD HANIFFA  
 BIOMEDICAL ENGINEER

First Verification  
QMS Circle Incharge

Final Verification  
QMS State Incharge





# KEMENTERIAN KESIHATAN MALAYSIA

MEET Planned Preventive Maintenance Checklist  
Photometer, Filter, Manual  
BE CODE : 18-258

CHECKLIST NO: CL-110-000  
REV.000

## PART 1 ASSET DETAILS

WORK ORDER NO ▶ PWO 365364 BE NO ▶ JH1000011  
MANUFACTURER ▶ NA MODEL ▶ NA  
FREQUENCY ▶ 6 MONTHLY ( ) 12 MONTHLY ( ✓ ) PPM HOURS ▶ 0.50

## 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
	TEEA0074	Electrical Safety Test	326906	9/16/18

## PART 4 QUALITATIVE TASKS

Tick ( ✓ ) where appropriate

	PASS	FAIL	NA		PASS	FAIL	NA
1 Chassis - verify physical integrity, cleanliness and condition	( ✓ )	( )	( )	7 Controls/Switches - verify proper operation of controls	( ✓ )	( )	( )
2 Mount/ Fasteners - verify physical integrity	( ✓ )	( )	( )	8 Indicators/ Displays - verify proper illumination and operation	( )	( )	( ✓ )
3 AC Plug - verify integrity	( ✓ )	( )	( )	9 Circuit Breaker/Fuse - verify integrity of external circuit breaker and/or rating of external fuse	( )	( )	( ✓ )
4 Power Cord - verify proper insulation and integrity	( ✓ )	( )	( )	10 Check lamp alignment	( ✓ )	( )	( )
5 Strain Relief - verify physical integrity at both ends of line cord	( ✓ )	( )	( )	11 Filters- Verify physical integrity	( )	( )	( ✓ )
6 Fittings/ Connectors - check all fittings/connectors	( ✓ )	( )	( )	12 Photo detector - check and verify proper operations and physical integrity	( )	( )	( ✓ )
				13 Test tube holder- check and verify proper operations and physical integrity	( ✓ )	( )	( )

Tick ( ✓ ) where appropriate

	DONE	NOT DONE **	NA
1 Inspect/ Clean exterior & Interior of unit	( ✓ )	( )	( )
2 Clean Filters and sensor	( )	( )	( ✓ )
3 Verify photometry linearity and accuracy using appropriate solution	( )	( )	( ✓ )

Notes:

\* For all Parts, NA is defined as NOT APPLICABLE

\*\* If you have ticked 'NOT DONE', then justify in Part 8

\*\*\* Choose whichever applicable.



# KEMENTERIAN KESIHATAN MALAYSIA

MEET Planned Preventive Maintenance Checklist

Photometer, Filter, Manual

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CHECKLIST NO:CL-110-000  
REV.000

WORK ORDER NO ▶

## PART 6 QUANTITATIVE TASKS

Tick (✓) where appropriate

No	Description	Units / UOM	Set Values	Measured Values	Limit/Tolerance	PAS S FAIL NA
	NOT APPLICABLE					( ) ( ) ( ) ( )

## PART 7 ELECTRICAL SAFETY TEST

ELECTRICAL SAFETY TEST, (attach report)

Tick (✓) where appropriate

Standard use :



IEC 60601



IEC 61010



IEC 62353

Result :



PASS



FAIL



NA

## PART 8 NOTES

*Handwritten note:* The equipment is functioning properly.



CORRECTIVE MAINTENANCE REQUIRED



FUNCTIONING



NOT FUNCTIONING

WORK ORDER NO ▶

NEXT PPM DA ▶ June 19

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

COMPLETED BY:

*Farhan*

DATE :

*26/6/18*



## Test Setup

Operator ID :  
 Calibration Tech : DINA  
 Calibration Date : 9/10/2017  
 Firmware Version : 2.08.01  
 Serial Number : 3226906  
 Date & Time : 06/26/2018 & 13:50  
 JOB Name :

## DUT Information

Equipment Number : JHR000011  
 Serial Number :  
 Manufacturer : NA  
 Model : NA  
 Location : KK BP  
 Other :

## Template Information

Template Name : JHR000011  
 Pause after Power ON: NO  
 Power ON delay: 2  
 Test Speed: NORMAL  
 Halt on Test Failure: YES  
 Include Time: YES  
 Insulation Resistance \ 500V  
 Multi Enclosure Test : NO

Standard : IEC60601-1-2nd Ed  
 Pause before Power O: 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 Part	999 MOhn -	-	-	P
Mains Voltage				P
Live to Neutral	241.1 V -	-	-	P
Equipment Current	0.2 A -	-	-	P
Enclosure Leakage Current				P
Normal Condition	0.6 uA-OP	100 -	-	P
Open Neutral	0.7 uA-OP	500 -	-	P
Open Neutral- Reversed Mains	0.5 uA-OP	500 -	-	P
Normal Condition- Reversed Mains	0.6 uA-OP	100 -	-	P
Earth Leakage Current				P
Open Neutral	2.0 uA-OP	1000 -	-	P

 **MOHD NAJIB FARHAN B. ISMAIL**  
 BIOMEDICAL ENGINEER  
 (012-396 7048)  
 QUANTUM MEDICAL SOLUTIONS SDN. BHD.  
 Signature

