

MARK-3[®] WATSON EDITION DIAGNOSTICS SOFTWARE

TECH-NOTE

Overview

WATERAX has released a diagnostics software for the MARK-3[®] Watson Edition. The PC/Windows[®] software allows the user to connect to the User Interface Module (UIM) and consult important pump data such as a total run time, battery voltage and historical sessions data that will help assess the condition of the engine and troubleshoot the unit. Connection is easily made through a USB-C port located on the UIM.



The latest software revision can be downloaded online through the WATERAX Technology Center. A login is required.



5 Categories



Main features

Read important pump data

- Consult important data such as:
 - Total run time (hour meter)
 - Number of starts
 - Speed operating range
 - Fault counts
 - UIM battery voltage

WATSON Diagnostic Tool V1.03


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Export...

GENERAL

REAL TIME

SESSIONS



1.Product Information	
Serial Number	--23B00310
Internal Clock	2025-02-21 11:54:39 AM
MAC Address	54F82A56A84A
2.Basic Statistics	
Hour Meter	112h 14m 34s
Successful Starts (>1600rpm or 30s)	64
Low Speed Operation (500-4500 rpm)	1 %
Mid Speed Operation (4501-6500 rpm)	3.6 %
High Speed Operation (6501-9000 rpm)	95.3 %
3.Fault Counts	
Low Battery (< 2.7 V)	0
LED Disconnected	0
LED Short-Circuit	0
Off Button Disconnected	1
Temp Sensor Disconnected	0
Temp Sensor Short-Circuit	0
4.Battery	
Low Battery Condition	No
5.Firmware Information	
Version	2.4
6.Settings	
Successful Starts	Above 1600 rpm or above 30 s
Low Speed Operation (%)	500 - 4500 rpm
Mid Speed Operation (%)	4501 - 6500 rpm
High Speed Operation (%)	6501 - 9000 rpm
Low Speed	Below 1000 rpm
Overspeed	Above 9000 rpm
Overheat - Warning	Between 150-160 °C (302-320 °F)
Overheat - Shutdown	Above 160 °C (320 °F)
Overheat - Gradient	Rise of 50 °C (122 °F) within 5 s
Low Battery	Below 2.7 V

Set Date & Clock

Firmware Update

Update UIM date/clock

- Update the date and clock after replacing the battery.

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Set Date & Clock

Firmware Update

Update the firmware

- Update to the latest UIM firmware through the software.
- The latest UIM firmware is available on the WATERAX Technology Center.
- The UIM firmware controls how the LED functions and sets important limits such as overheat warning and shutdown temperatures.

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Set Date & Clock

Firmware Update

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Read Live Data

- Connect to the UIM while the pump is running to view real-time test data

WATSON Diagnostic Tool V1.03


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Export...

GENERAL

REAL TIME

SESSIONS



Set Date & Clock

Firmware Update

1.Diagnostics	
Hour Meter	112h 14m 34s
Initial State	Off (0x0)
Current State	Off (0x0)
2.Engine Speed	
Current Speed	0 rpm
Max. Speed	0 rpm
3.Temperature	
Current Engine Temp.	22°C / 72°F
Max. Engine Temp	0°C / 32°F
Current UIM Temp.	23°C / 73°F
Max. UIM Temp	0°C / 32°F
4.Electrical	
Battery Voltage	3.1 V
Generator Voltage	0 V
USB Voltage	5.01 V

Read Data From Last Ten Sessions

- The **SESSIONS** page displays data from the last 10 sessions as recorded by the UIM.
- Historical data can help troubleshoot the unit.

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Export...

Session 01	
Start	2023-08-01 2:46:39 PM
End	2023-08-01 2:46:52 PM
Session Run Time	0h 0m 13s
Cumulative Successful Start Count	63
Previous Shut Down Reason	Off Button Pressed (0x4)
Session Shut Down Reason	Off Button Pressed (0x4)
Min. Engine Speed	1608 rpm
Avg. Engine Speed	2584 rpm
Max. Engine Speed	3718 rpm
Low Speed Operation (500-4500 rpm)	0h 0m 13s
Mid Speed Operation (4501-6500 rpm)	0h 0m 0s
High Speed Operation (6501-9000 rpm)	0h 0m 0s
Min. Engine Temperature	26°C / 79°F
Avg. Engine Temperature	26°C / 79°F
Max. Engine Temperature	28°C / 82°F
Min. UIM Temperature	25°C / 77°F
Avg. UIM Temperature	25°C / 77°F
Max. UIM Temperature	25°C / 77°F
Initial Battery Voltage	3.2 V
Final Battery Voltage	3.2 V

Session 02	
Start	2023-07-25 6:17:43 PM
End	2023-07-25 6:44:17 PM
Session Run Time	0h 26m 34s
Cumulative Successful Start Count	62
Previous Shut Down Reason	Off Button Pressed (0x4)
Session Shut Down Reason	Off Button Pressed (0x4)
Min. Engine Speed	2399 rpm
Avg. Engine Speed	5841 rpm
Max. Engine Speed	6145 rpm
Low Speed Operation (500-4500 rpm)	0h 0m 31s
Mid Speed Operation (4501-6500 rpm)	0h 21m 2s

Set Date & Clock

Firmware Update

Export and Save Data

- The data from each page can be exported and saved into a text format for file keeping and future reference.

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Firmware Update

For additional information, log in to the WATERAX Technology Center.

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To help you stay **#ReadyForWildfires**, we've made a few changes, placing 100% of our focus on manufacturing our core products, portable fire pumps.

To do so, we've established a network of trusted supply and distribution partners that can help us provide *WATERAX* pumps quickly in addition to water-handling equipment and accessories.

For immediate assistance when it comes to pumps and water-handling accessories, please [contact your local dealer](#).

For genuine spare parts, visit our [online store](#).

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