

DataLogger[®] 7



McELROY
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DLP0857591
Rev 10/20
Original Language: English

Operator's Manual

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P.O. Box 580550
Tulsa, Oklahoma 74158-0550, USA**

Important Safety Information

Most accidents that involve product operation, maintenance and repair are caused by failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing potentially hazardous situations before an accident occurs. A person must be alert to potential hazards. This person should also have necessary training, skills and tools to perform these functions properly.

Advanced training is offered through McElroy University. Course offerings are meant to enhance your efficiency, productivity and safety in the proper use of McElroy equipment.

Improper operation, maintenance or repair of this product can be dangerous and could result in injury or death.

Do not operate this product until you have carefully read, and understand all the sections of this manual, and all other equipment manuals that will be used with it.

Follow all applicable federal, state, local, and industry specific regulations.

The hazards are identified by the "Safety Alert Symbol" and followed by a "Signal Word" such as "DANGER", "WARNING" or "CAUTION". The Safety Alerts are shown below.

The meaning of these safety alert symbols are as follows:

 **DANGER** - Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING** - Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION** - Indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.

Signal words "**NOTICE**" and "**IMPORTANT**" are used to bring attention to important information.

The meaning of these signal words are as follows:

"NOTICE" - Can keep you from doing something that might damage the machine or someone's property. It may also be used to alert against unsafe practices.

"IMPORTANT" - Can help you do a better job or make your job easier in some way.

McElroy cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this publication and on the product are, therefore, not all inclusive. If a tool, procedure, work method or operating technique that is not specifically recommended by McElroy is used, you must satisfy yourself that it is safe for you and for others. You should also ensure that the product will not be damaged or be made unsafe by the operation, maintenance or repair procedures that you choose.

The information, specifications, and illustrations in the publication are on the basis of information that was available at the time that the publication was written. The specifications, pressures, measurements, adjustments, illustrations, and other items can change at any time. These changes can affect the service that is given to the product. Obtain the complete and most current information before you start any job. The most current information is available at our website

www.mcelroy.com

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FOREWORD

Literature Information

This manual should be stored in a protected location for future reference. Use the literature holder if provided with the product.

This manual contains safety information, set up and operation instructions.

Some photographs or illustrations in this publication show details or equipment that can be different from your product.

Continuing improvement and advancement of product design might have caused changes to your product which are not included in this publication. Read, study and keep this manual with the product.

Whenever a question arises regarding your product, or this publication, please contact McElroy Technical Services at 918-831-9224 or techsupport@mcelroy.com

Safety

The safety section lists basic safety precautions.

Read and understand the basic precautions listed in the safety section before operating this product.

Operation

The operation section is a reference for the new operator and a refresher for the experienced operator.

Photographs and illustrations guide the operator through correct procedures of setting up, checking and operating the product.

Operating techniques outlined in this publication are basic. Proficiency develops as the operator gains knowledge and experience with the product and its capabilities.

McElroy University

For more than 30 years, McElroy has been the only pipe fusion machine manufacturer to continuously offer advanced training. Course offerings are meant to enhance your efficiency, productivity and safety in the proper use of McElroy machines. McElroy University classes are structured so that the skills learned and the machines used in each class closely match the machines found on pipelining jobsites. We offer training at our facility or yours. Our uniquely qualified McElroy University course instructors offer years of industry experience.

Tuition for each course includes lunches, course materials and a certificate of completion. Online registration, as well as up-to-date course offerings and dates, is available at www.mcelroy.com/university

This manual is intended as a guide only and does not take the place of proper training by qualified instructors. The information in this manual is not all inclusive and can not encompass all possible situations that can be encountered during various operations.



Patent Information

This product and other products could be protected by patents or have patents pending. All the latest patent information is available at patent.mcelroy.com

Replacement Literature

Print a copy of the manual at www.mcelroy.com.

Trademarks

Google and Android are trademarks of Google Inc.

The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc.

All other brand and product names are trademarks or registered trademarks of their respective companies.

Graphics

The graphics shown in this document are for reference only. They may differ from the actual screens generated by the actual product.

ASTM Standard

The DataLogger® meets the requirements of ASTM F3124, Standard Practice for Data Recording the Procedure used to Produce Heat Butt Fusion Joints in Plastic Piping Systems or Fittings.

Limited Warranty

McElroy Manufacturing, Inc. (McElroy) warrants all products manufactured, sold and repaired by it to be free from defects in materials and workmanship, its obligation under this warranty being limited to repairing or replacing at its factory and new products, within **5 years** after shipment, with the exception of purchased items (such as electronic devices, pumps, switches, etc.), in which case that manufacturer's warranty applies. Warranty applies when returned freight is prepaid and which, upon examination, shall disclose to have been defective. This warranty does not apply to any product or component which has been repaired or altered by anyone other than McElroy or has become damaged due to misuse, negligence or casualty, or has not been operated or maintained according to McElroy's printed instructions and warnings. This warranty is expressly in lieu of all other warranties expressed or implied. The remedies of the Buyer are the exclusive and sole remedies available and Buyer shall not be entitled to receive any incidental or consequential damages. Buyer waives the benefit of any rule that disclaimer of warranty shall be construed against McElroy and agrees that such disclaimers herein shall be construed liberally in favor of McElroy.

Return of Goods

Buyer agrees not to return goods for any reason except upon the written consent of McElroy obtained in advance of such return, which consent, if given, shall specify the terms and conditions and charges upon which any such return may be made. Materials returned to McElroy, for warranty work, repair, etc., **must have a Return Material Authorization (RMA) number**, and be so noted on the package at time of shipment. For assistance, inquiry shall be directed to:

McElroy Manufacturing, Inc.
P.O. Box 580550
833 North Fulton Street Tulsa, Oklahoma 74158-0550
PHONE: (918) 836-8611, FAX: (918) 831-9285.
EMAIL: fusion@McElroy.com

Note: Certain repairs, warranty work, and inquiries may be directed, at McElroy's discretion, to an authorized service center or distributor.

Disclaimer of Liability

McElroy accepts no responsibility of liability for fusion joints. Operation and maintenance of the product is the responsibility of others. We recommend qualified joining procedures be followed when using McElroy fusion equipment.

McElroy makes no other warranty of any kind whatever, express or implied; and all implied warranties of merchantability and fitness for a particular purpose which exceed the aforesaid obligation are hereby disclaimed by McElroy.

Product Improvement

McElroy reserves the right to make any changes in or improvements on its products without incurring any liability or obligation to update or change previously sold machines and/or the accessories thereto.

Information Disclosed

No information of knowledge heretofore or hereafter disclosed to McElroy in the performance of or in connection with the terms hereof, shall be deemed to be confidential or proprietary, unless otherwise expressly agreed to in writing by McElroy and any such information or knowledge shall be free from restrictions, other than a claim for patent infringement, is part of the consideration hereof.

Proprietary Rights

All proprietary rights pertaining to the equipment or the components of the equipment to be delivered by McElroy hereunder, and all patent rights therein, arising prior to, or in the course of, or as a result of the design or fabrication of the said product, are exclusively the property of McElroy.

Law Applicable

All sales shall be governed by the Uniform Commercial Code of Oklahoma, U.S.A.

Register your product online to activate your warranty: www.McElroy.com/fusion

(Copy information listed on the product nameplate here for your records).

Model No. _____

Serial No. _____

Date Received _____

Distributor _____

SAFETY

There can be several specific safety messages on this machine. The exact location of the hazards and the description of the hazards are reviewed in this section. Please become familiarized with all safety messages.

Make sure that all of the safety messages on the machine are legible. Clean the safety messages or replace the safety messages if you cannot read the words. Replace if the illustrations are not legible. When you clean the safety messages, use a cloth, water and soap. Do not use solvent, gasoline, or other harsh chemicals to clean the safety messages. Solvents, gasoline, or harsh chemicals could loosen the adhesive that secures the safety message or damage the print of the safety message.

Replace any safety message that is damaged, or missing. If a safety message is attached to a part that is replaced, install a safety message on the replacement part. New safety messages can be ordered from McElroy using the part number listed.

General Safety

Safety is important. Report anything unusual that you notice during set up or operation.

LISTEN for thumps, bumps, rattles, squeals, air leaks, or unusual sounds.

SMELL odors like burning insulation, hot metal, burning rubber, hot oil, or natural gas.

FEEL any changes in the way the equipment operates.

SEE problems with wiring and cables, hydraulic connections, or other equipment.

REPORT anything you see, feel, smell, or hear that is different from what you expect, or that you think may be unsafe.

Safety Equipment



SAFE1ST-12-22-92

Wear a hard hat, safety shoes, safety glasses, and other applicable personal protective equipment.

Remove jewelry and rings, and do not wear loose fitting clothing or long hair that could catch on controls or moving machinery. Remove any loose safety equipment during an operation that could be drawn into or caught in the machine.

Ensure proper fire prevention or other fire-fighting equipment is available and all personnel know how and when to use it.

Equipment Not Explosion Proof

This safety message is located on the cord of the heater.



DataLogger® equipment is not explosion proof. Operation of equipment in an explosive atmosphere may result in serious injury or death.

Do not operate this equipment in an explosive atmosphere.



WR00034-11-30-92

Units with Hydraulics



Escaping fluid under pressure can penetrate the skin causing serious injury. Keep hands and body away from pinholes which eject fluid under pressure. Use a piece of cardboard or paper to search for leaks. If any fluid is injected into the skin, it must be immediately removed by a doctor familiar with this type of injury.

For hydraulically operated equipment, it is important to remember that a sudden hydraulic oil leak can cause serious injury, or even be fatal if the pressure is high enough.

NOTICE: Wear safety glasses, and keep face clear of area when bleeding air from hydraulic system to avoid spraying oil into eyes.



WR00078-4-8-93

Heater is Hot

⚠ CAUTION

The heater is hot and will burn clothing and skin. Keep the heater in its insulated heater stand or blanket when not in use, and use care when heating the pipe.

NOTICE: Use only a clean non-synthetic cloth such as a cotton cloth to clean the heater plates.



WIR00030-2-10-93

Fusion Machine Procedures

Familiarize yourself with the fusion machine you will be working with by reading the Manufacturer's manuals for the machine. Read the Safety Information to avoid potentially dangerous situations.

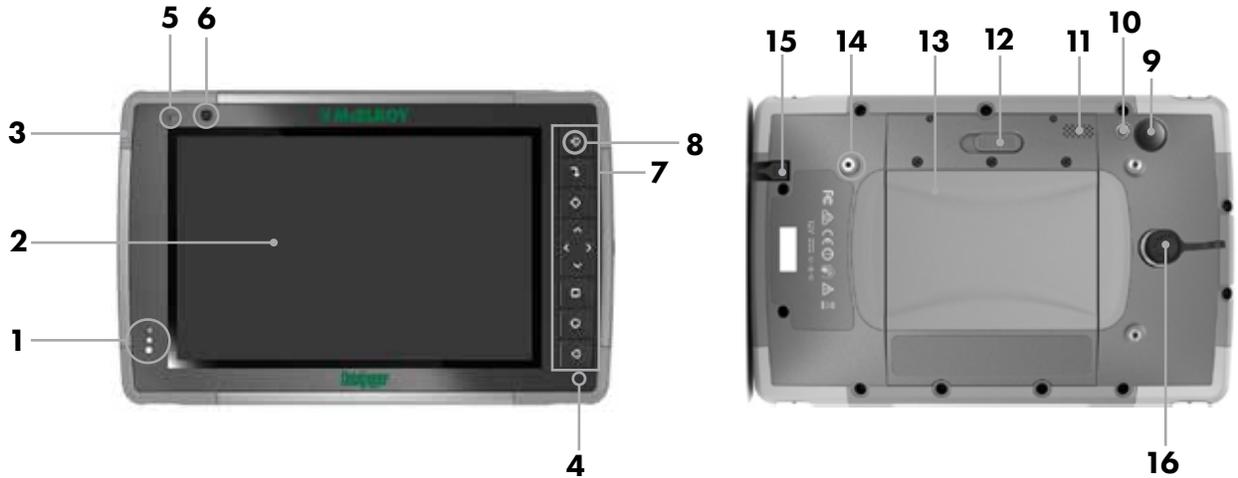
NOTICE: Follow the pipe manufacturer's procedures or appropriate joining standard for fusing the pipe being used.

Failure to adhere to proper machine and fusion procedures can result in damage to the machine and bad fusion joints.

GENERAL INFORMATION

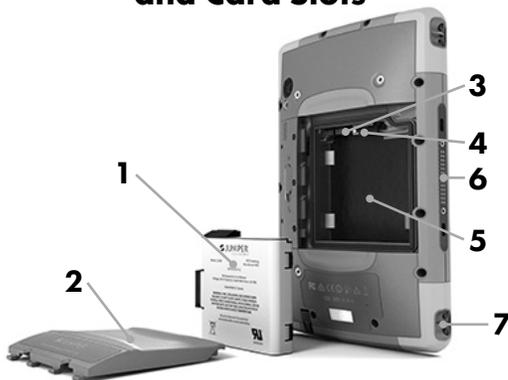
DataLogger® 7 Hardware Components

Front and Back Features



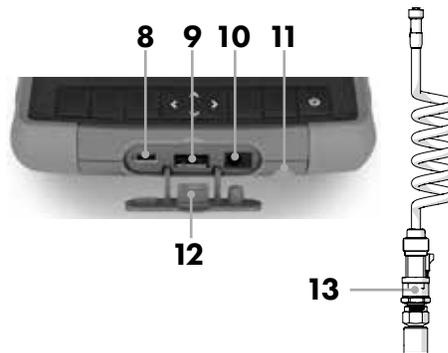
- | | |
|--|--|
| <ul style="list-style-type: none"> 1 Notification LEDs 2 Touchscreen and Display 3 Protective Over-molded Bumper (all four edges) 4 Microphone (one on each side) 5 Ambient Light Sensor 6 Front Facing Camera Lens, 2 MP 7 Keypad 8 Power Key | <ul style="list-style-type: none"> 9 Rear Facing Camera Lens, 16 MP 10 Camera Flash 11 Speaker 12 Battery Door Lock 13 Battery Compartment, SIM and SD Card Slots 14 External Device Attachment Point (1 of 3 on the back) 15 Storage Slot for Fine Tip Stylus 16 Switchcraft Connector Port |
|--|--|

Battery Compartment and Card Slots



- 1 Battery Pack, Removable
- 2 Battery Door
- 3 Micro SIM Card Slot and Micro SD/SDHC Card Slot (under card retainer)
- 4 Flexible Card Retainer
- 5 Battery Compartment
- 6 Docking Port Connections

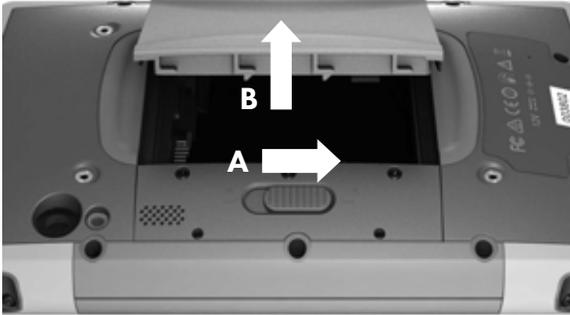
Connector Ports



- 7 Hand Strap Attachment Point
- 8 USB-C, USB 3.1, 5V 1.5A Max Output
- 9 USB 2.0 Host, 5V 500mA Max Output
- 10 12 VDC Power Input Jack
- 11 Storage Slot for Fine Tip Stylus
- 12 Connector Port Protector
- 13 Transducer and Cable

Installing the SIM Card and SD Card (Optional)

1. Slide the battery compartment lock (A) to the unlocked position.



2. Remove the compartment door (B). Remove the battery. The Micro SIM and SD cards slots are under the battery. Pull flexible card holder out of the way.



Flexible Card Holder

3. Insert SIM card into the proper slot. Push flexible card holder back into place.
4. Replace the battery and reattach door and lock. Activate SIM card per carrier instructions.

Charging the Battery

Connect the AC adapter to charge the battery.



The LED battery charge indicator blinks red when the unit is plugged in and the battery is charging. The LED indicator will be solid red when the battery is charged (not charging).

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Performing the Initial Startup

1. Press the power button to turn on your device.
2. Follow the on-screen instructions to complete the setup process.
After the setup is completed, the Home screen appears. You can now use your device.
3. The tablet will include a formatted and installed SD card from McElroy. If a new SD card is installed, you will need to format the card to use with the device.

OPERATION

Waking Up

Your device sleeps after a period of inactivity.

To wake up, press the power button and, at the lock screen, drag the lock icon to the other side of the screen.

Shutting Down

To shut down, press and hold the power button until a menu pops up. Touch Power off and then OK.

Home Screen

The Home screen is your starting point to access all the features on your device.



Navigation bar:



opens a screen containing thumbnails of application you've used recently.



opens the Home screen.

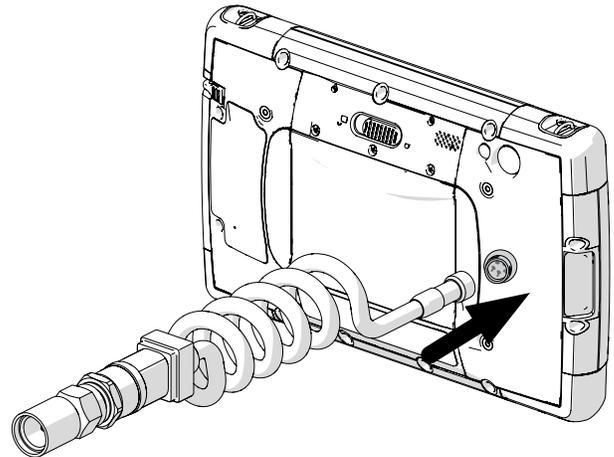


goes back to the previous screen.

DataLogger® App

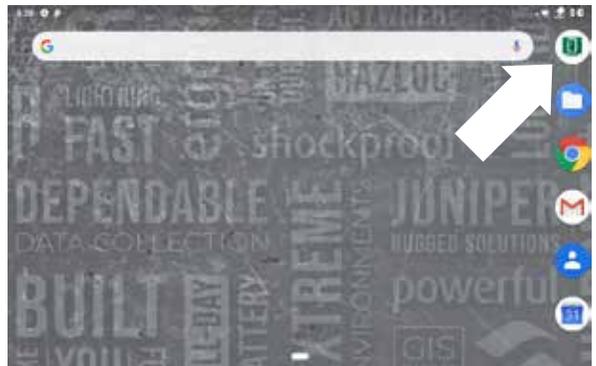
Connect Pressure Transducer to Fusion Machine

1. Connect the pressure transducer end of the cable to the DataLogger port of fusion machine. Refer to the operator's manual of the fusion machine for the port location.
2. Connect the connector end of the cable to the connector port on the back of the tablet.



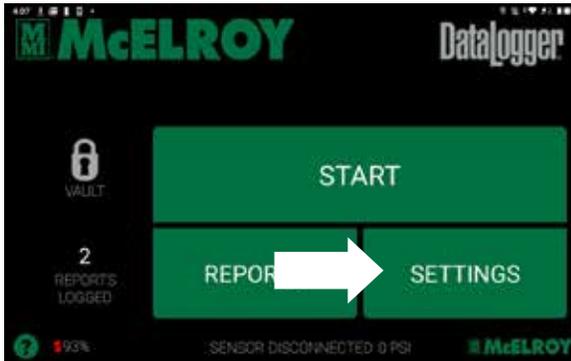
Starting the DataLogger® 7 App

1. Open to the Home screen.
2. Tap the DataLogger® 7 App icon to open the application.

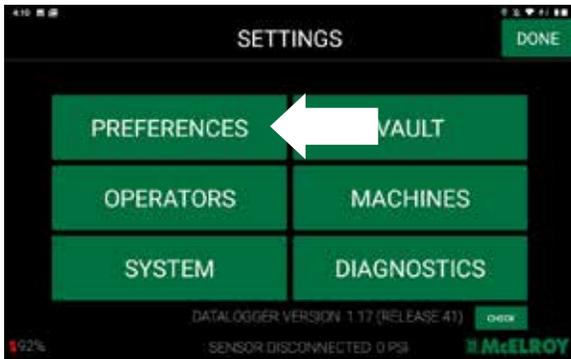


Select Software Language

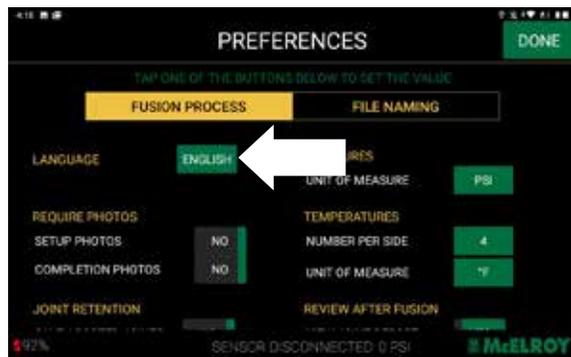
1. Tap Settings on the Main Menu.



2. Tap Preferences on the Settings Menu.



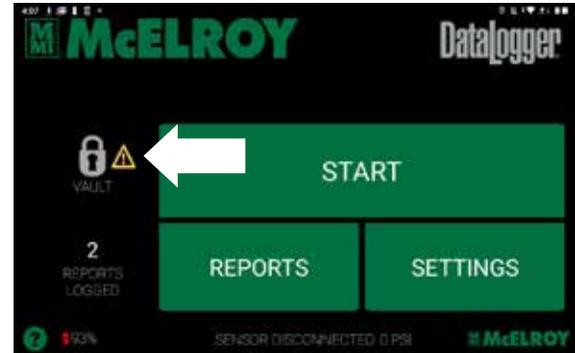
3. Tap the Language button and set to the desired language.



Entering Vault Information

1. Tap the lock icon on the main screen to open the DataLogger® Vault™ log in screen.
2. Log into a DataLogger® Vault™ account using a username and password.

If you do not have a Vault account, open an internet browser on this tablet and go to vault.mcelroy.com. Create an account and return to the DataLogger 7 App and enter the username and password.



Log a Fusion Joint

1. Tap the START button.
2. Follow the on-screen instructions to enter all the joint information and select the fusion parameters.

After the setup is completed, logging of the fusion joint can begin.

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TROUBLESHOOTING

Perform a Hard Reset

1. If the tablet has froze and won't respond, hold the power key down for 2 to 3 seconds to see if the menu with the "Power off" option appears, then select that operation.

If the menu doesn't appear, hold the power key down for 10 seconds. This causes a hardware shut off. Press the power key again to power it on.

If hold the power key for 10 seconds doesn't shut off the device, hold the power button down for 20 seconds. Batteries are forced to electrically disconnect from the tablet, causing a complete shut down. The tablet cannot be powered on again until an external power supply is attached.

IMPORTANT: To be able to power the device on again, you will need to be able to use the external power supply. You will need to have access to a power source for the power supply.

NOTICE: Forcing a shut-down while the unit is running can cause damage to the device. NEVER force shut-down the tablet under normal operating conditions.

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Power Key



MAINTENANCE

Usage and Care

Pressure Sender cord

The coiled cord, which connects the pressure sender to the tablet, has screw connectors on both ends. If the cord is damaged it is easily replaced by unscrewing both ends and installing a new cord.

Quick Disconnect

This DataLogger® uses an improved quick disconnect on the pressure sender. It is designed to seal reliably but not trap pressure in the line. It can be connected under pressure if necessary. To use this unit on older fusion machines you will need Fusion Machine Adapter Kit ADL6001. Remove the QD and fittings on the carriage manifold TXA port and replace them with the elbow and QD in the kit.

Pressure Sender

The pressure sender is verified at McElroy Manufacturing, Inc. and a certification document is included. Its calibration should be checked annually to maintain factory quality.

Tablet

Keep the tablet clean especially around the connections, camera, and keypad. Keep the screen clean and free of debris.

No User Serviceable Parts

NOTICE: There are no parts of the DataLogger® that can be repaired by the user. Do not try to open the unit. Any attempt to open the unit can affect the weatherproofing and can damage the unit.

Calibration

Pressure sender must be sent to McElroy or Authorized Service Center every year for certification.

A backup pressure sender may be kept on hand to minimize down time.

Replacement Parts and Accessories

For replacement parts and accessories, visit the McElroy Parts Finder at: <http://fusion.mcelroy.com/parts/exec>

Enter your Serial Number or Model/Part Number to find parts and accessories for your equipment.

TX05412-10-15-20

SPECIFICATIONS

Specifications

DataLogger 7 Specs

Model: DLP0857716

Supported Standards: ASTM F3124, ASTM F2620, ISO 21307, GIS/PL2-3-07, Profuse, DS/INF 70-2 PE:HD, WIS 4-32-08, DVS 2207-1 PE-HD, DVS 2207-11 PP, DS/INF 70-2 PP, PPI TR-33, additional standards upon request.
See device for latest list of supported standards.

Weight: 1.5 - 2.0 lbs. (680 - 907g) Battery Dependant

Dimensions: 5.40" W x 8.48" L x 1.36" D (137 x 215 x 35 mm)

Screen: 1200 x 800 WXGA, protected capacitive touchscreen

Operating System: Android 9.0

Memory: 6 GB

Microprocessor: Qualcomm® Snapdragon™ Octa-core Kryo™ 260

Storage: 64 GB eMMC Flash Storage, MicroSDXC card slot

Connectivity: Bluetooth® v5.0 + EDR, Class 1.5, BLE support, Wi-Fi 802.11 a/b/g/n/ac, 2.4 GHz and 5 GHz, 4G LTE multi-carrier capable, GPS, GLONASS, and Galileo

Camera: Rear 16MP with LED illumination, Front 2 MP

Power Requirements: 100-240 V, 12V, 50/60 Hz

Battery: Internal Battery: Li-Ion 21.6 Whr

Removable Battery: Li-Ion 43.2 Whr

Operating Temperature: -4°F to 122°F (-20°C to 50°C)

Storage Temperature: -22°F to 158°F (-30°C to 70°C)

Ruggedness: MIL-STD-810G, IP68

Inclusions: Tablet, transducer, A/C adapter, machine mount, stylus, carrying case, removable battery, screen protector

TX05413-10-15-20



P.O. Box 580550 Tulsa, Oklahoma 74158-0550, USA
www.mcelroy.com