



Instruction Manual

Model Number: ACP-01

Reference: Certificate UL E104709

Document No.
55-MN-02 Rev.4.3

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1. SCOPE

This Instruction Manual provides information on safe installation, use and servicing of BrightLync according to UL Standards **UL 60079-0, UL 60079-11, UL 61010-1, CSA C22.2 No. 60079-0:19, CSA C22.2 No. 60079-11:14, CSA C22.2 No. 61010-1.**

⚠ "This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation."

⚠ "This device complies with the ISED Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation."

⚠ "Radiofrequency radiation exposure information: this equipment complies with the radiation exposure limits prescribed for an uncontrolled environment for fixed and mobile use conditions. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and the body of the user or nearby persons. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter except as authorized in the certification of the product"

⚠ "Any changes or modifications made to this device that are not expressly approved by Romet could void the user's authority to operate the equipment"

⚠ The gain of the system antenna(s) used for the Product (i.e. the combined transmission line, connector, cable losses and radiating element gain) must not exceed the value specified in the FCC Grant for mobile and fixed or mobile operating configurations.

⚠ Cet appareil est conforme aux normes RSS d'ISDE Canada en matière d'exemption de licence. Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférences nuisibles et (2) il doit accepter toute interférence reçue, y compris celles qui peuvent entraîner un fonctionnement indésirable.

⚠ Informations sur l'exposition aux rayonnements radiofréquences : cet équipement est conforme aux limites d'exposition aux rayonnements prescrites pour un environnement non contrôlé dans des conditions d'utilisation fixes et mobiles. Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et le corps de l'utilisateur ou des personnes à proximité. Cet émetteur ne doit pas être placé à proximité ou fonctionner conjointement avec une autre antenne ou un autre émetteur, sauf autorisation dans la certification du produit

⚠ IMPORTANT: Tout changement ou modification apporté à cet appareil qui n'est pas expressément approuvé par Romet pourrait annuler l'autorité de l'utilisateur à utiliser l'équipement.

2. MARKING INFORMATION



Fig.1 BrightLync Label/Nameplate



BATTERY PACK P/N 55-092-10

WARNING: BATTERY PACK SUITABLE FOR USE WITH BRIGHTLYNC MODEL ACP-01.

WARNING: RISK OF FIRE, EXPLOSION AND SEVERE BURNS HAZARDS.
DO NOT RECHARGE, DISASSEMBLE, INCINERATE, CRUSH, HEAT ABOVE 100°C (212°F), OR EXPOSE CONTENTS TO WATER.

AVERTISSEMENT: BLOC-BATTERIE ADAPTÉ À UNE UTILISATION AVEC LE MODÈLE BRIGHTLYNC ACP-01.

AVERTISSEMENT: RISQUE D'INCENDIE, D'EXPLOSION ET DE GRAVES BRÛLURES. NE PAS RECHARGER, DÉMONTÉ, INCINÉRER, ÉCRASER, CHAUFFER AU-DESSUS DE 100°C (212°F) OU EXPOSER LE CONTENU ARROSER.

WK/YY

BrightLync®



Fig.2 BrightLync Battery Label

ROMET®

BATTERY PACK P/N 55-092-10

WARNING: BATTERY PACK SUITABLE FOR USE WITH BRIGHTLYNC MODEL ACP-01.

WARNING: RISK OF FIRE, EXPLOSION AND SEVERE BURNS HAZARDS. DO NOT RECHARGE, DISASSEMBLE, INCINERATE, CRUSH, HEAT ABOVE 100°C (212°F), OR EXPOSE CONTENTS TO WATER.

AVERTISSEMENT: BLOC-BATTERIE ADAPTÉ À UNE UTILISATION AVEC LE MODÈLE BRIGHTLYNC ACP-01.

AVERTISSEMENT: RISQUE D'INCENDIE, D'EXPLOSION ET DE GRAVES BRÛLURES. NE PAS RECHARGER, DÉMONTER, INCINÉRER, ÉCRASER, CHAUFFER AU-DESSUS DE 100°C (212°F) OU EXPOSER LE CONTENU ARROSER.

50/22

BrightLync®



Control No: 5029428
Conf to UL STDs 60079-11,
60079-0, 61010-1,
Cert. to CSA STDs C22.2# 60079-11,
60079-0, 61010-1-12.

Fig. 1a BrightLync Label/Nameplate



Serial Number: AA36220270
Model Number: ACP-01
TELEMETERING EQUIPMENT FOR HAZARDOUS LOCATION.
INTRINSICALLY SAFE – SÉCURITÉ INTRINSÈQUE

ROMET®

SEE BRIGHTLYNC INSTALLATION MANUAL 55-MN-02 FOR ADDITIONAL RATINGS, WIRINGS, SAFETY INFORMATION, I.S. ENTITY PARAMETERS AND CONTROL DRAWING 55-090-0.
INTRINSICALLY SAFE WHEN INSTALLED IN ACCORDANCE WITH MANUFACTURER'S CONTROL DRAWING 55-090-0.

BATTERY POWERED 3.6V, AMBIENT TEMP. RANGE: -40°C to +70°C (-40°F to +158°F).
WARNING: USE ONLY UL RECOGNIZED COMPONENT- REPLACEABLE ROMET BATTERY PACK P/N 55-092-10.
DO NOT REPLACE BATTERY WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT.
AVERTISSEMENT: UTILISEZ UNIQUEMENT LA BATTERIE ROMET REMPLAÇABLE P/N 55-092-10 RECONNUE PAR UL. NE REMPLACEZ PAS LA BATTERIE EN PRÉSENCE D'UNE ATMOSPHÈRE EXPLOSIVE.

WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY.
AVERTISSEMENT: LA SUBSTITUTION DE COMPOSANTS PEUT NUIRE À LA SÉCURITÉ INTRINSÈQUE.

This product contains FCC ID XPY2AGQN4NNN
IC: 8595A-2AGQN4NNN

This product contains FCC ID XPYNINAB1, IC: 8595A-NINAB1

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



Control No: 5029428
Conf to UL STDs 60079-11,
60079-0, 61010-1,
Cert. to CSA STDs C22.2# 60079-11,
60079-0, 61010-1-12.

5030 TIMBERLEA BLVD.
MISSISSAUGA, ON. L4W 2S5
CANADA



0947313333333030002C0020

BrightLync®

Scan QR code for
installation instructions



Fig. 2a BrightLync Battery Label

NOTE: Labels may contain additional information not related to UL certification.

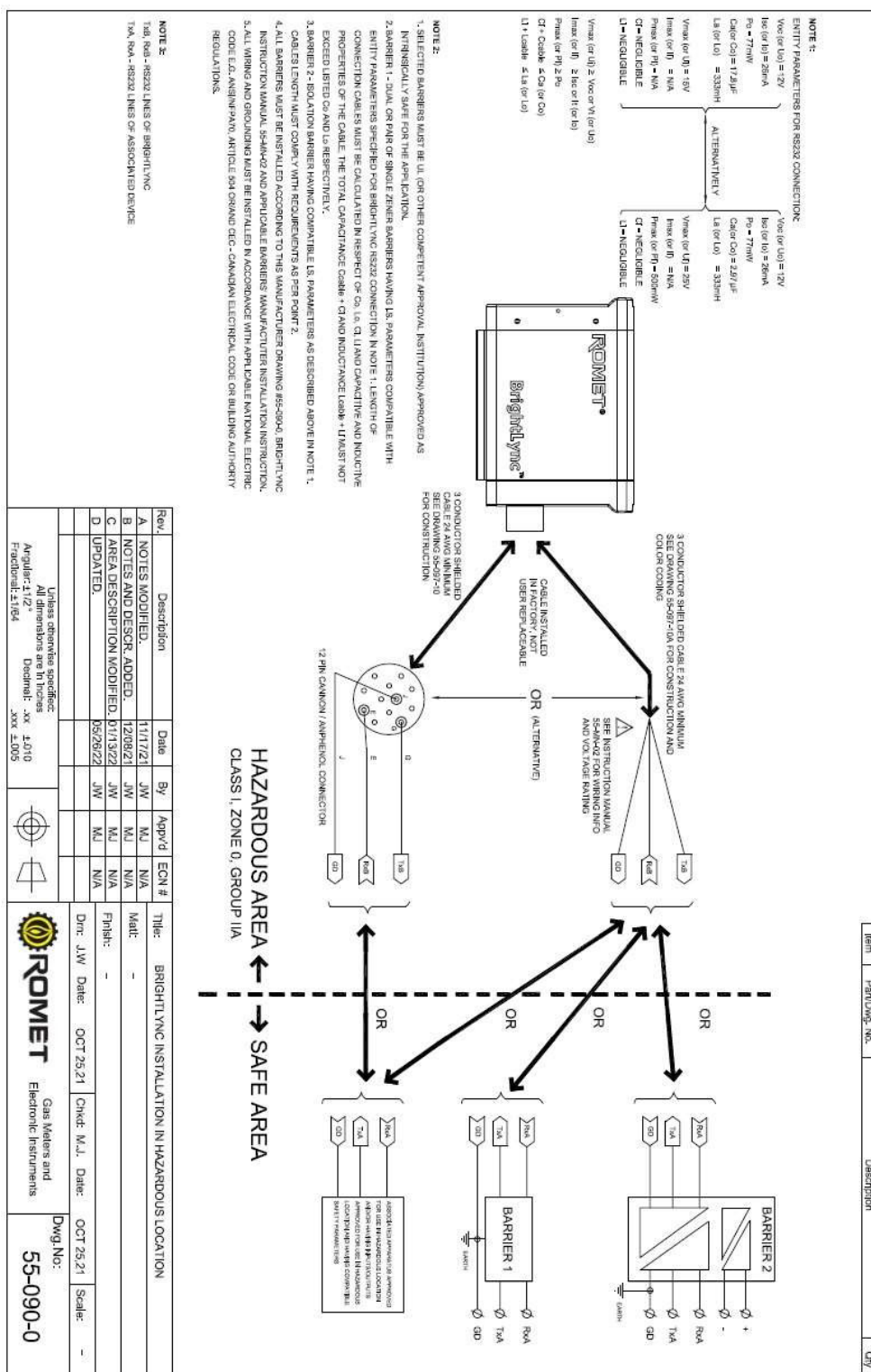


Fig.3 BrightLync I.S. Control Drawing 55-090-0

4. RS232 I/O I.S. ENTITY PARAMETERS

Voc (or Uo) = 12
 VIsC (or Io) = 26
 mAPo = 77 mW
 Ca (or Co) = 17.8
 μ F La (or Lo) =
 333 mH

Alternatively

Vmax (or Ui) =
 15VImax (or Ii) =
 N/A Pmax (or Pi)
 = N/ACi =
 NEGLIGIBLE
 Li =
 NEGLIGIBLE

Voc (or Uo) = 12
 VIsC (or Io) = 26
 mAPo = 77 mW
 Ca (or Co) = 2.97
 μ F La (or Lo) =
 333 mH

Vmax (or Ui) = 25V
 Imax (or Ii) = N/A
 Pmax (or Pi) = 500
 mWCi =
 NEGLIGIBLE
 Li = NEGLIGIBLE

Vmax (or Ui) $\geq$ Voc or Vt (or
 Uo)Imax (or Ii) $\geq$ IsC or It (or
 Io) Pmax (or Pi) $\geq$ Po
 Ci + Ccable $\leq$ Ca (or
 Co)Li + Lcable $\leq$ La
 (or Lo)

5. RS232 CONNECTION CABLE

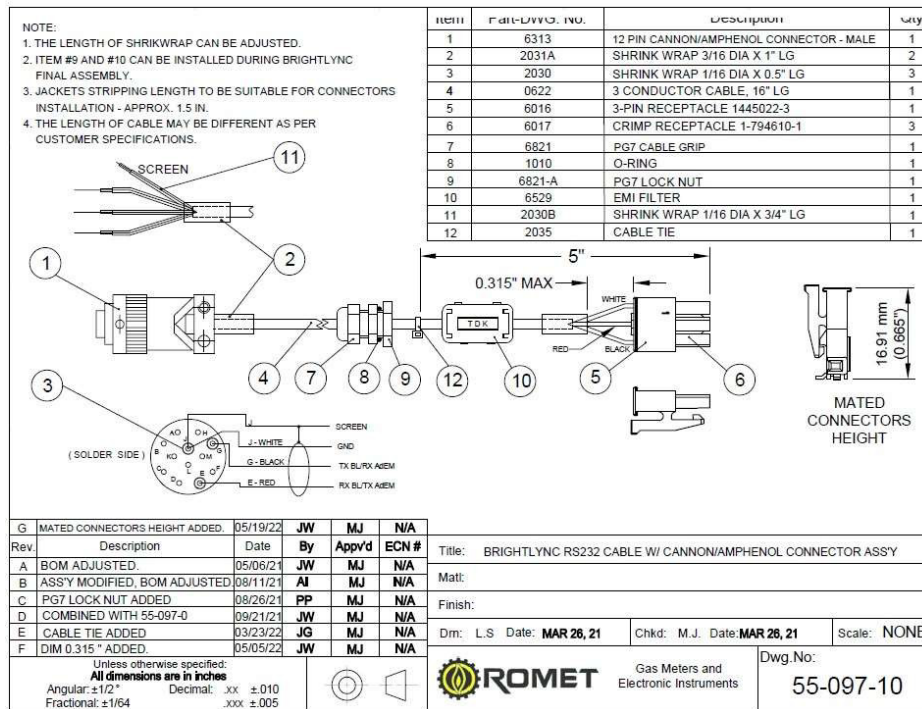


Fig.4 BrightLync RS232 Cable with Cannon/Amphenol Connector

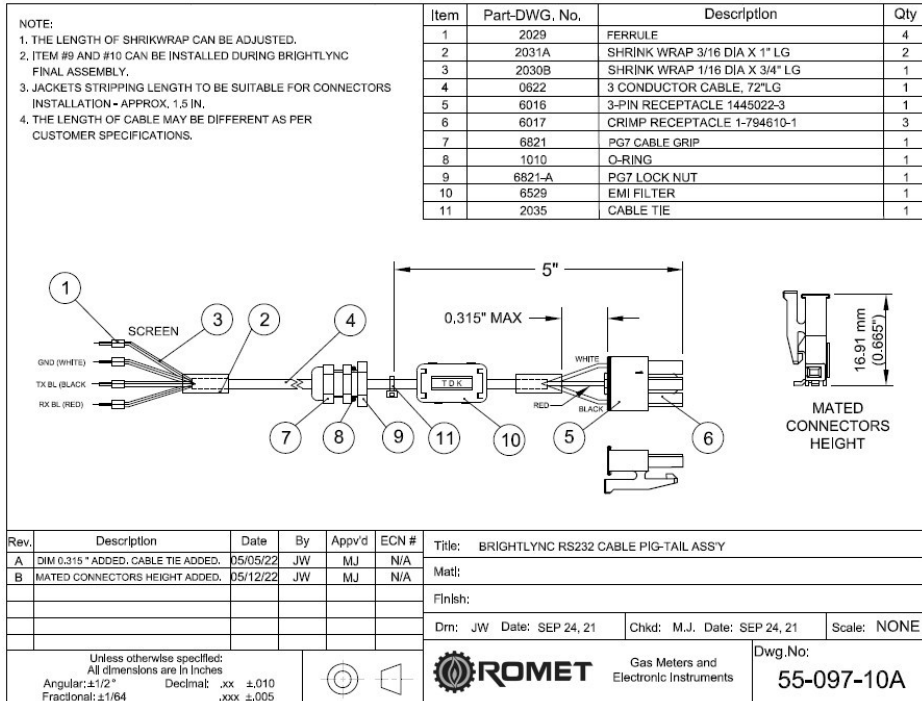


Fig.5 BrightLync RS232 Cable – Pigtail Alternative

For wiring, use copper conductors or "CU" only. 13 – 30 AWG, 300V MIN, 70°C MIN, minimum 0.5mm thickness of insulation between wires. Colour coding as per Fig.4 and Fig.5 unless specified differently by the user.

6. ELECTRICAL AND ENVIRONMENTAL RATING

This equipment is suitable for use in Class I, Zone 0, AEx ia IIA Ga and Ex ia IIA Ga. Temperature code: T3

ELECTRICAL

RS232 I/O:

+ 15V STANDARD, ± 25V
MAX

AS APPLICABLE WITH
CONSIDERATION OF ENTITY
PARAMETER LISTED IN CHAPTER
4

INPUT POWER:

3.6VDC D-CELL LITHIUM
PACK

ENVIRONMENTAL

AMBIENT TEMPERATURE: -40°C TO +70°C (-40°F to

+158°F) MAXIMUM RELATIVE HUMIDITY: 95% NON-CONDENSING

ALTITUDE: UP TO 5000m

POLLUTION DEGREE: PD2

SELF DECLARED IP67/ NEMA TYPE 4X RATING NOT EVALUATED BY UL or ETL

7. INSTRUCTIONS FOR SAFETY

Warnings:

- The equipment shall be installed according to manufacturer's control drawing No. 55-090-0 (see sections 3, 4 and 5).
- Not to be installed on surfaces that are a source of heating.
- Battery pack replacement and servicing must be done when an explosive atmosphere is not present.
- Replace battery pack only with UL or ETL recognized component, Romet Battery Pack P/N 55-092-10.
- Substitution of components may impair intrinsic safety.
- When using BrightLync in a hazardous location, ignition hazards due to impact or friction of the aluminum mounting clamp must be considered.
- Mechanical installation and servicing, including but not limited to, cleaning, wiping, rubbing of aluminum clamp must be done when an explosive atmosphere is not present.

Avertissements:

- L'équipement doit être installé conformément au dessin de commande du fabricant n° 55-090-0 (voir les sections 3, 4 et 5).
- Ne pas installer sur des surfaces source de chauffage.
- Le remplacement et l'entretien de la batterie doivent être effectués en l'absence d'atmosphère explosive.
- Remplacez la batterie uniquement par un composant reconnu UL ou ETL, la batterie Romet P / N 55-092-10.
- La substitution de composants peut nuire à la sécurité intrinsèque.
- Lors de l'utilisation de BrightLync dans un endroit dangereux, les risques d'inflammation dus à l'impact ou au frottement de la pince de montage en aluminium doivent être pris en compte.
- L'installation et l'entretien mécaniques, y compris, mais sans s'y limiter, le nettoyage, l'essuyage ou le frottement de la pince en aluminium doivent être effectués lorsqu'une atmosphère explosive n'est pas présente.

Battery Warnings:

- Battery pack suitable for use with BrightLync model ACP-01.
- Risk of fire, explosion, and severe burns hazards. Do not recharge, disassemble, incinerate, crush, heat above 100°C (212°F) or expose contents to water.

Avertissements de batterie:

- Batterie adaptée à une utilisation avec BrightLync modèle ACP-01.
- Risque d'incendie, d'explosion et de brûlures graves. Ne pas recharger, démonter, incinérer, écraser, chauffer au-dessus de 100 °C (212 °F) ou exposer le contenu à l'eau.

Important Notes:

- Safety of any system incorporating the equipment is the responsibility of the assembler of the system. Conformity to be checked by user inspection.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment might be impaired.

For more information on installation and operation, refer to the BrightLync User Manual (55-MN-01).

8. CONTACT INFORMATION FOR SERVICE AND TECHNICAL SUPPORT

For product related information, service, and technical support contact:

Romet Limited

5030 Timberlea Blvd.
Mississauga, Ontario
L4W 2S5, Canada

Tel: 800 387 3201

Email: romet@rometlimited.com



Appendix A

User Guide

Model Number: ACP-01

Document No.
55-MN-01 Rev.4.3

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Section 1- Appendix A - BrightLync® Overview

What is BrightLync

BrightLync Advanced Communications Platform is a secure, cloud-based system that provides a complete end-to-end 2-way secure data transmission solution. It seamlessly integrates with the Adem® Advanced Electronics Platform or any measurement device with serial communications or pulse output.

BrightLync is a cost-effective, premium solution that is designed to create a connected network for gas utilities, enabling new and mature infrastructure with near real-time data transmission, organization, and visualization.

How does the BrightLync Advanced Communication Platform work

BrightLync delivers information into the hands of decision makers by enabling data transmission between edge devices such as meters, pressure monitors, and electronic volume correctors (EVC) to utility operations via secure cloud services. Data is generated at utilities' endpoints which is collected and organized by Adem. BrightLync seamlessly integrates serially with Adem to enable remote data transmission for near real-time collection, alarm alerts, asset monitoring, over-the-air asset configuration/updates, and data visualization.

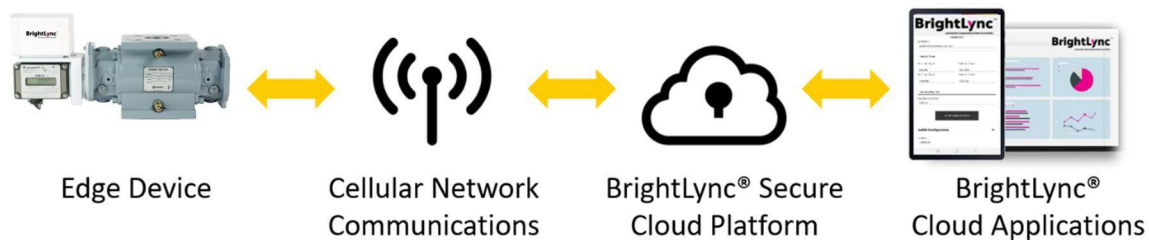


Image 1.1 – Romet's Technology Stack

BrightLync utilizes existing secure cellular network infrastructure to communicate with the BrightLync cloud platform. This minimizes the up-front investment due to not requiring large-scale network infrastructure. BrightLync is inherently secure and allows for resource auto scaling, eliminating the need for future hardware investment as the network grows. The BrightLync Advanced Communications Platform can be interfaced with through the Energy Array Device Manager and Mobile Application.

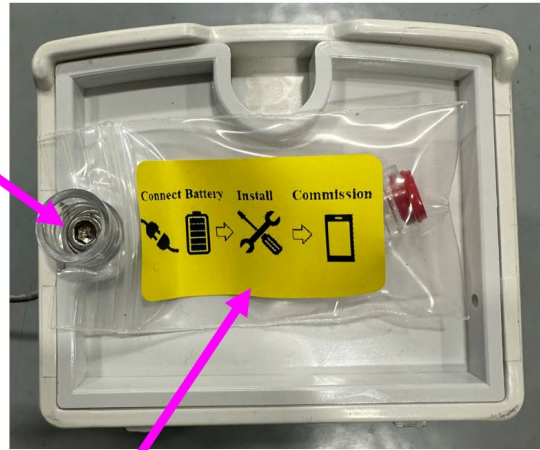
What's included in the box



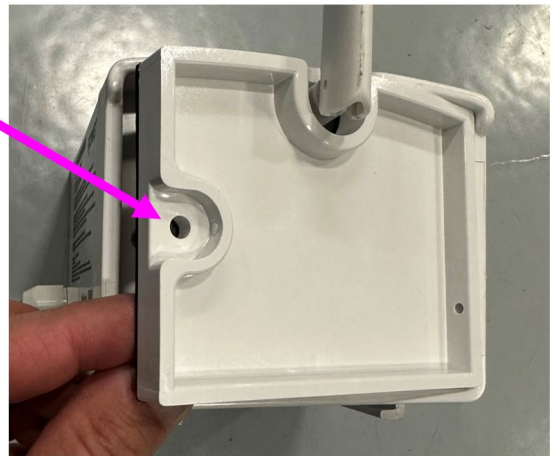
- (A) Qty 1: BrightLync Module
- (B) Qty 1: Mounting Bracket (PN 55-444-1)
- (C) Qty 1: Bracket Clamp (PN 55-444-2A)
- (D) Qty 2: Installation hardware- Allen Head Cap Screw (PN 1196)- only 1 required for installation
- (E) Qty 2: Installation hardware - Lock Washer (PN 2071)- only 1 required for installation
- (F) Qty 1: Installation hardware – Flat washer PN (1185)
- (G) Qty 1: Installation hardware - Rock seal bushing (PN 2-341-3)
- (H) Qty 2: Installation hardware - Tamper plug (PN 2-341-2)
- (I) Qty 1: Installation hardware - Seal cup (PN 2-341-1)

Section 2 – Connecting or Changing the Battery

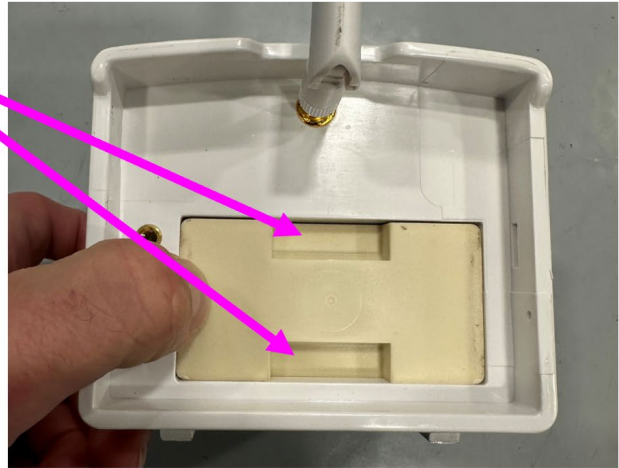
- Step 1
 - Remove the screw on the battery lid
 - Set aside screws and security cup



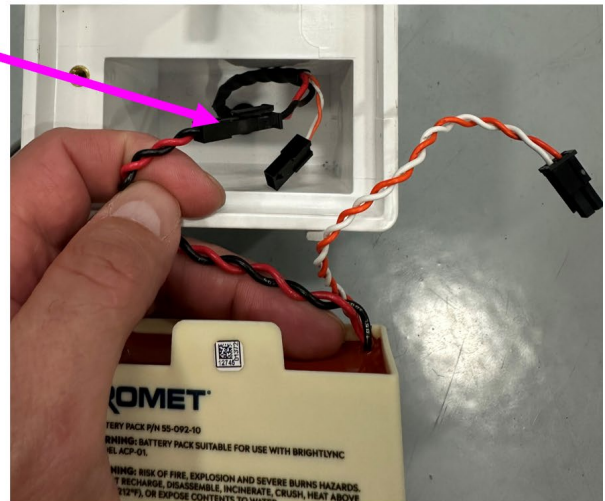
- Step 2
 - Remove battery lid from the left-hand side (screw hole location)
 - Open similar to a door (swinging outward / towards you)



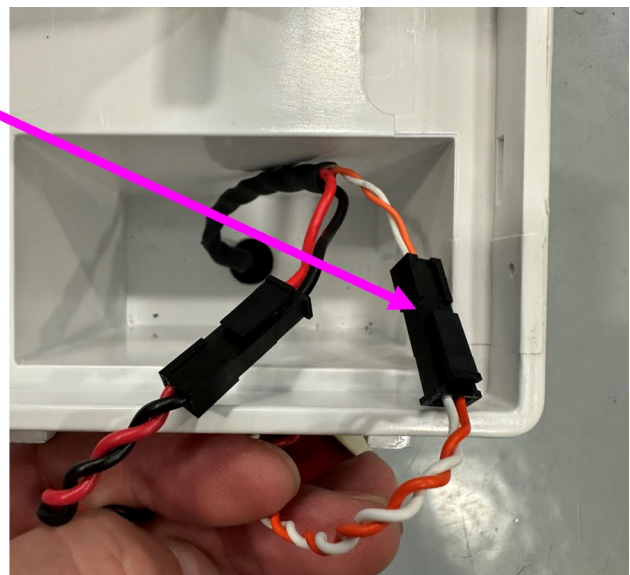
- Step 3
 - Remove battery pack by pulling from the two (2) indented tabs



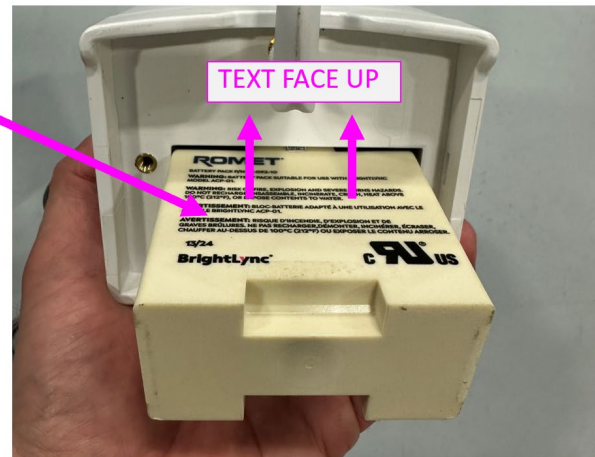
- Step 4
 - Connect the Red/Black wires first



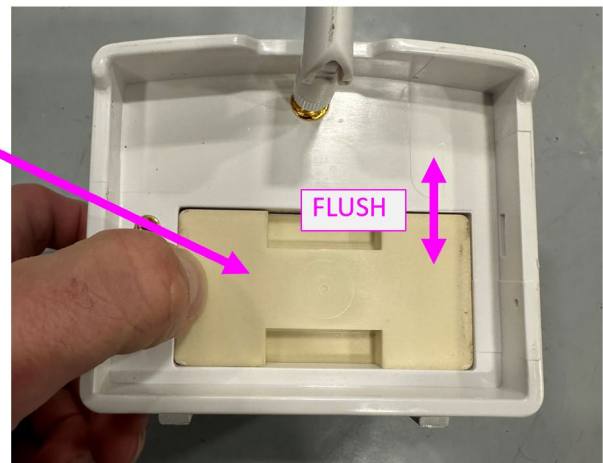
- Step 5
 - Connect the Orange/White wires second



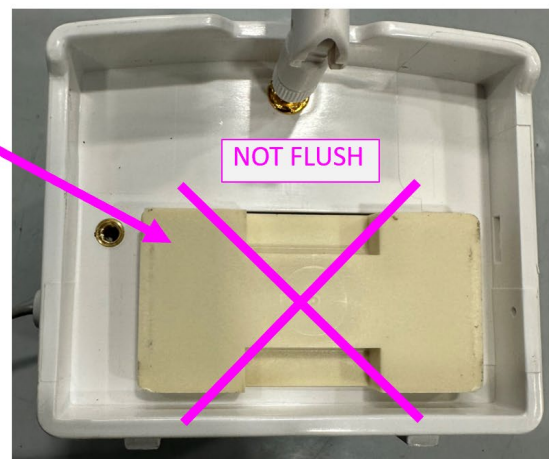
- Step 6
 - Re-insert the battery pack back into the BrightLync with the text on the battery pack 'face up'



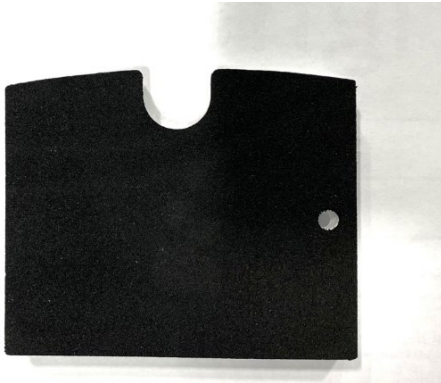
- Step 7
 - Push the battery pack carefully until battery pack is flush with BrightLync



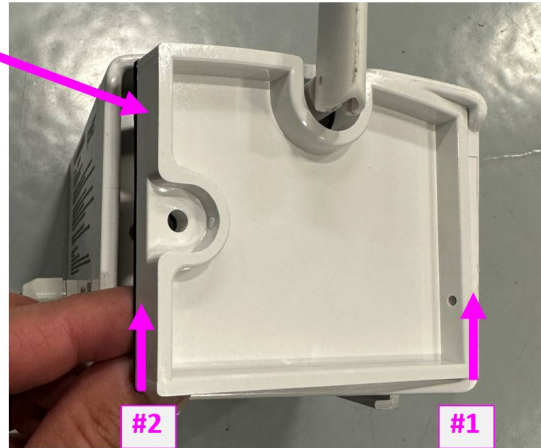
- Step 7 continued
 - If battery pack will not go flush, remove and re-adjust the wires and re-insert



- Step 8
 - Install the battery lid with the right edge first followed by left side



NOTE: gasket will come attached to backside of the battery lid (adhesive backing)



- Step 9
 - Re-install the screw kit back into the BrightLync as found (as removed)



Lock-washer

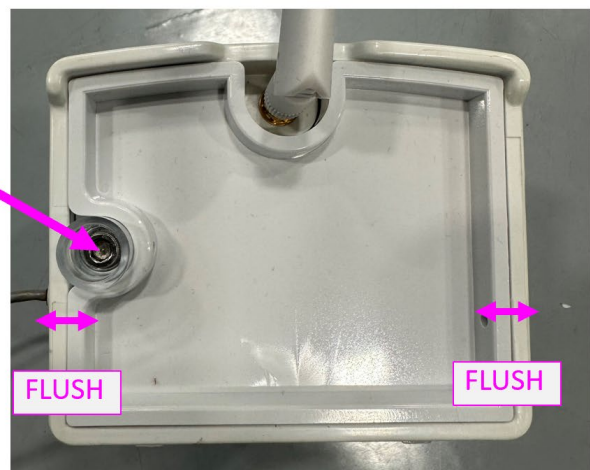
Flat washer

Security cup washer



Security cup

- Step 10
 - Tighten the screw by ensuring that both sides of the battery lid are flush with the BrightLync



Section 3 – Installation and Commissioning

Installing your BrightLync Module

BrightLync seamlessly integrates with Adem Electronics and can be installed directly onto Adem.

WARNING: Individuals servicing the BrightLync need to be grounded at all times for ESD protection, especially if installing a remote antenna.

1. Place the assembled module and bracket on top of the Adem, ensuring it sits flat and square with the Adem EVC (see image 2.1). Secure the assembly to the Adem module with the bracketclamp by seating the hook of the clamp onto the back ledge and “notch” of the mounting bracket. Let the clamp naturally wrap under the Adem (see image 2.2). Secure the assembly together with the supplied Allen cap screw and seal. Using a 5/32” hex driver or Allen key and hand tight only (ensure not to over torque the screw).

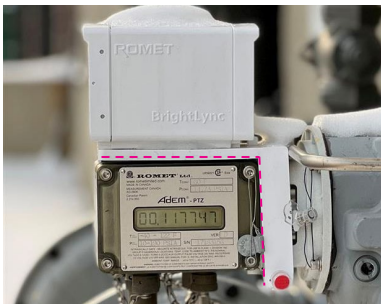


Image 2.1



Image 2.2



Image 2.3

2. Once BrightLync has been mechanically installed onto the Adem EVC, locate the 12-pin cannon RS232 serial communication connection on the bottom of the Adem and remove the cap. Locate the BrightLync cable and associated 12-pin male connector to carefully align and insert into the female connection on the Adem. Ensure that the 12pins have aligned and are fully inserted by turning the connection clockwise until a hard stop is felt and the locking pin on the female connection is observed through the male connector (see image 2.5).

12pin Cannon RS232
Serial Communication
Connection (Female)

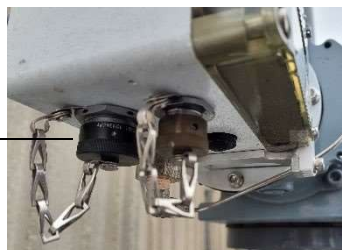


Image 2.4



Image 2.5

3. If it is an external brightlync device, ensure that the antenna stabilizer is installed (see image 2.6) so that the antenna will be secured and prevented from rotating after the installation is completed.



Image 2.6

ROMET®

BrightLync®

ADVANCED COMMUNICATIONS PLATFORM

Appendix B

BrightLync Commissioning

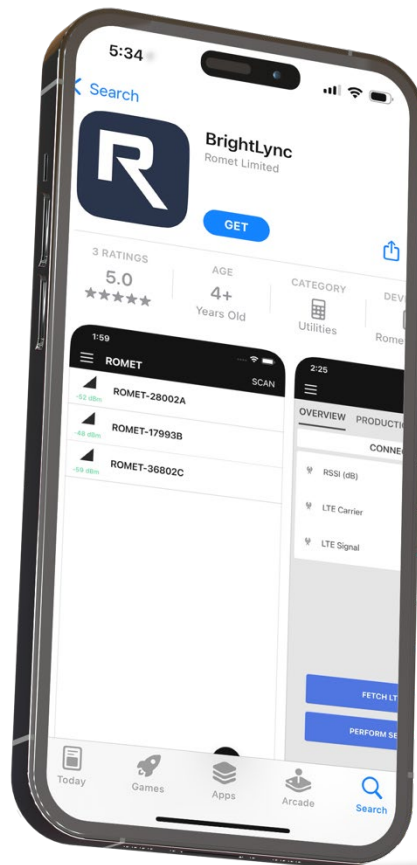


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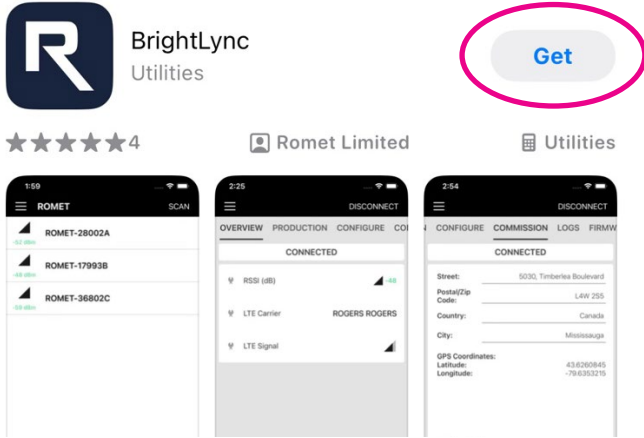
 UPLOAD A PHOTO..... 11

 DISCONNECT 12

BRIGHTLYNC COMMISSIONING

INITIAL SETUP

Begin the initial setup and commissioning process of your BrightLync module.



1. Download the Romet BrightLync App from the Apple App Store or the Android Play Store, if not already installed on your device.

2. Enter 'BrightLync' in the search function.

NOTE: Ensure that your device (e.g., iPhone, iPad, Android Mobile, or Tablet) is configured to stay awake for at least 5 minutes to ensure it does not 'go to sleep' or 'Autolock' mode during the commissioning process.



3. Ensure that the BrightLync module is physically installed and connected to an Adem before you proceed with the commissioning steps.

NOTE: Connecting the battery must be done before commissioning as new units are shipped with the battery 'unplugged'.



4. Scan the QR code for installation instructions and user manual.



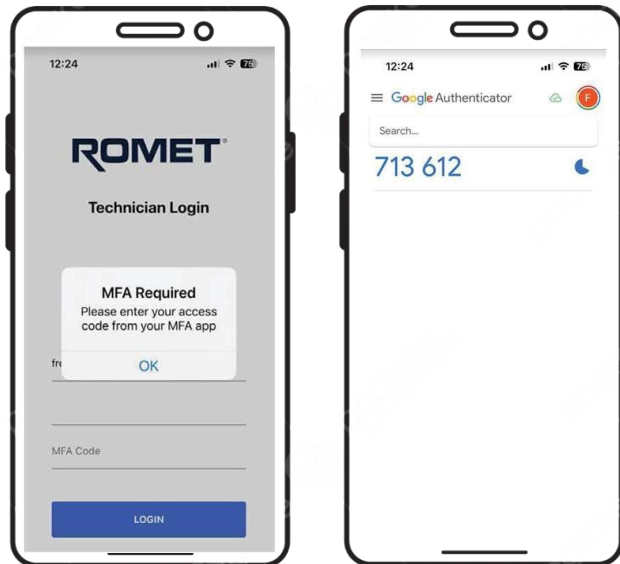
NOTE: If the BrightLync is not connected through the 12-pin serial connection before the BrightLync module is connected to the app, the commission process will not be successful.

LOGIN

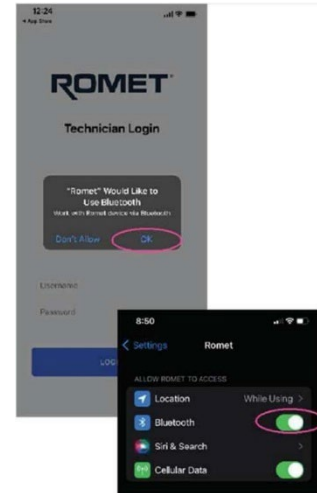
Once the BrightLync app is downloaded and installed, open the app and begin the commissioning process.



1. Enter your Username and Password.
2. Select LOGIN.
3. Contact your utility system administrator for your BrightLync username and password if you do not have one.

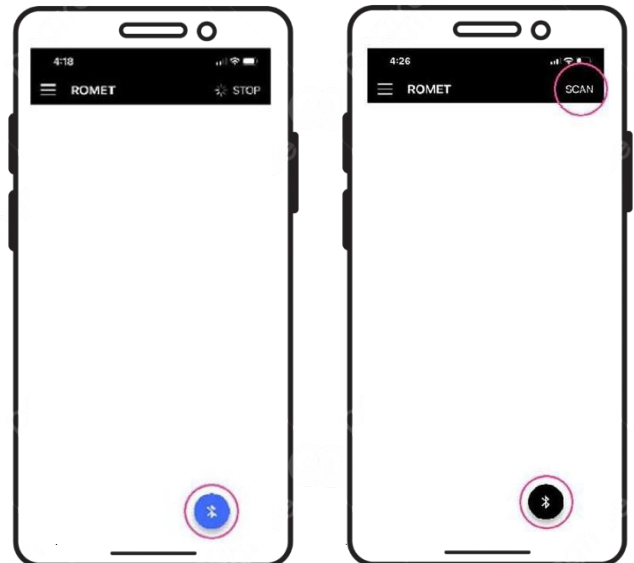


4. Multi-Factor Authentication (MFA) is required to gain access to the BrightLync App.
5. Press OK.
6. Enter the MFA number from the Google Authenticator



NOTE: If the Bluetooth on your device is not enabled before initially opening the app, a message prompt 'Romet Would Like to Use Bluetooth' will appear on your screen. Always select 'OK' to enable the Bluetooth service. If you select 'Don't Allow' the commissioning

process will not be successful.



7. Upon a successful 'Login', the app will automatically begin searching for available BrightLync modules to establish a connection.

8. Select 'SCAN' on the upper right to begin scanning.

PAIRING

Initiate the Bluetooth pairing connection



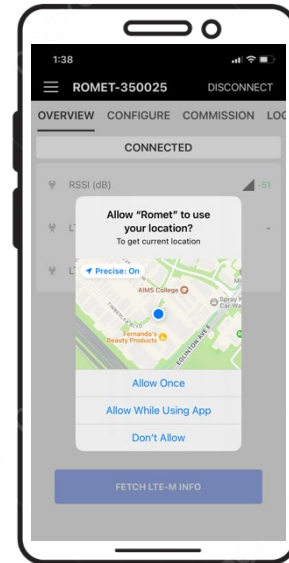
1. Momentarily place a Romet provided magnet tool on the raised 'target circle' located on the top side of the BrightLync module.

NOTE: After connecting the battery, Brightlync will take 4 minutes to initialize before it can be activated using a magnet. Using a third-party magnet is not recommended as the magnet sensor is sensitive to polarity and it may not function as intended.

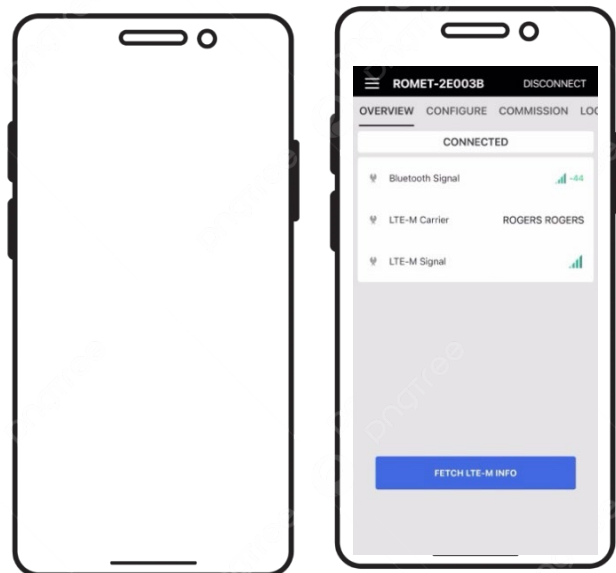


2. The BrightLync module(s) will become visible on the app. Select the appropriate BrightLync module to pair with your device.

NOTE: The BrightLync module will appear with the following nomenclature: 'ROMET-XXXXXX' with the last six (6) characters representing the last six (6) alphanumeric digits from the associated BrightLync

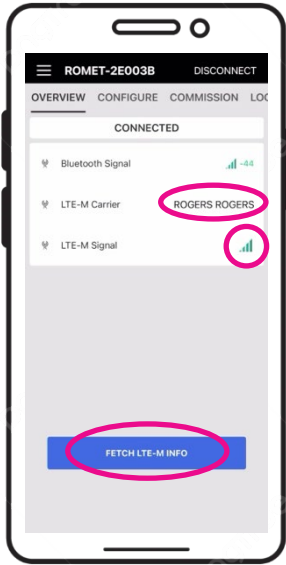


NOTE: If the Location Service on your device is not enabled before initially opening the app, a message prompt (see image above) 'Allow Romet to use your location?' will appear on your screen. Always select 'Allow While Using App' to enable the Location Service. If you select another option, the commissioning process will not be successful.



module IoT number found on the back of the module.

NOTE: When the connection is made to the module (the BrightLync module is paired with the device), the app will automatically navigate to the overview tab. This Initializing activity takes approximately up to 3 minutes, during which time a small circling symbol will be in the center of the screen with “Initializing...This will take up to 3 minutes” message at the bottom of the screen, and the background will be grayed out.

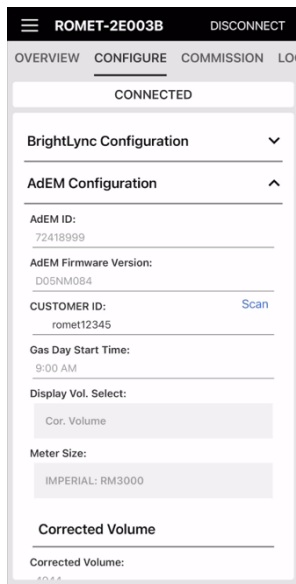


Once the connection is complete and the screen is no longer grayed out, press “Fetch LTE-M Info”. After approximately 20 seconds the “LTE-M Carrier” and “LTE-M Signal” fields will populate indicating the cellular carrier and signal strength. The number of green colored bars indicates signal strength.

LTE-M Signal	Action
	Proceed with commissioning.
	Proceed with commissioning.
	Proceed with commissioning.
	Proceed with commissioning.
	“Weak signal. Commissioning may be successful due to the unstable network” - Wait 30 seconds and try to Fetch LTE-M again. If you receive the same message again, this could possibly be resolved by utilizing an external antenna and/or antenna extender.
	“Could not read LTE-M information” - Indicates that the device attempt to retrieve connectivity from the tower is not successful. Refer to the troubleshooting guide for steps.
	“No signal- commissioning will not be successful” - Wait 30 seconds and try to Fetch LTE-M again. If you receive the same message, signal on the tower near the device may be too low or not support LTE-M. Refer to the troubleshooting guide for steps.

CONFIGURE TAB

Navigate to the CONFIGURE tab to enable BrightLync and Adem configurations.



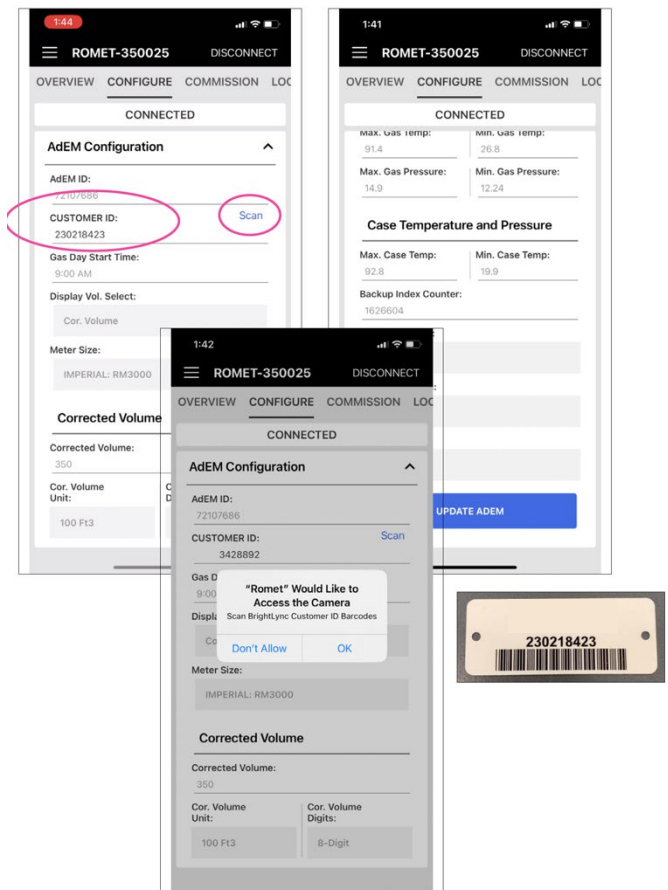
1. The Log Reporting Time will automatically match the Gas Day Start Time. The Log Reporting Time refers to the time at which the BrightLync module sends the audit trail logs of the Adem to the cloud daily.

NOTE: The Log Reporting Time hour will automatically match the Gas Day Start Time configured in the Romet Adem. (e.g., if the Gas Day Start Time is set for 9:00 am, the Log Reporting Time will be randomly selected and set from 7 – 53 minutes.

After commissioning, the BrightLync transmission frequency (1,2,3,4,6,8,12,24) can be configured. The minutes will be the same as the Log Reporting Time. This setting manages the additional regularly scheduled time(s) of when BrightLync wakes up and sends data to the cloud.

Notice: Modifying the transmission frequency from the default of once (1) a day will impact battery life

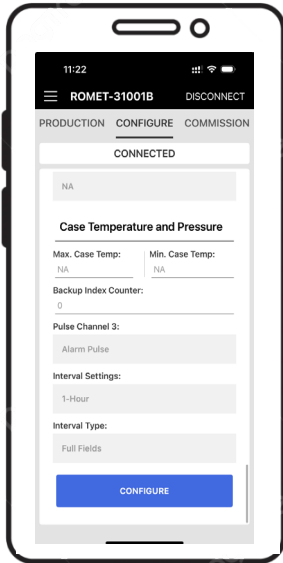
2. Review the settings and select the 'CONFIGURE' button before proceeding to the next step, to save changes.



The CONFIGURE tab will also provide options to modify the configuration of the Adem (The configuration of Adem will automatically be retrieved through BrightLync via the initial serial connection during installation).

3. Enter the desired utility company Customer ID. This number will be associated with the BrightLync module and the associated meter. This number can be up to 16 alphanumeric characters. **No Spaces.**

Alternatively, Customer ID can be scanned by clicking on the Scan option available next to the Customer ID. A prompt to access the device camera will appear on your screen. Always select 'OK' to enable the camera to capture the Customer ID bar code. If access to the camera is denied, the Customer ID has to be manually entered.

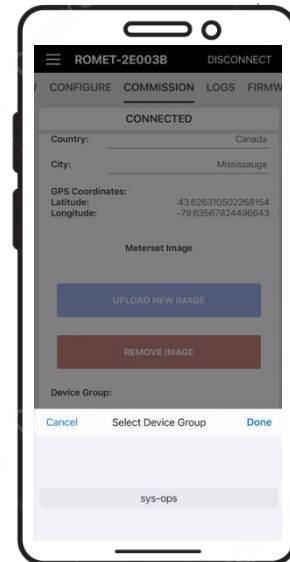
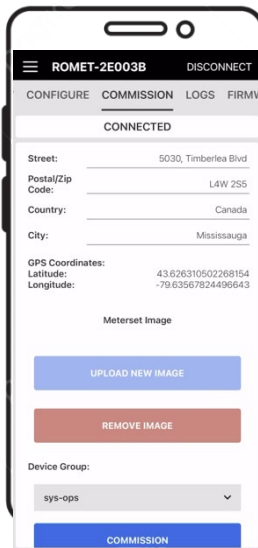


The installation address fields will automatically be filled using the GPS coordinates.

NOTE 1: If the automatically filled address field is incorrect, it can be manually edited to the correct address. Address field can be updated after commissioning using "Update Address" button without the need for the device need to be decommissioned.

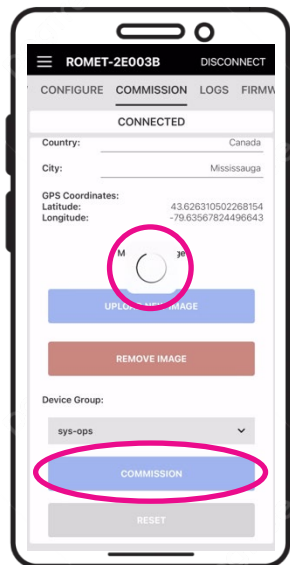
NOTE 2: 'Reset Start Date' is used when the battery is changed to reset battery life calculations. BrightLync does not have to be recommissioned to reset battery life calculations.

4. Changes made to the Customer ID need to be configured by selecting the blue 'CONFIGURE' button before proceeding to the next step. If you do not select this request, you will receive a message, 'You have unsaved BrightLync or AdEM data', when trying to leave the tab without saving the changes.



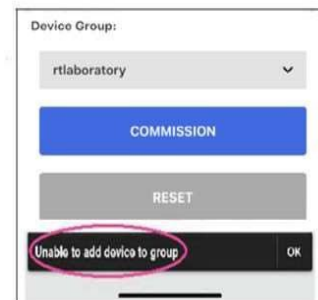
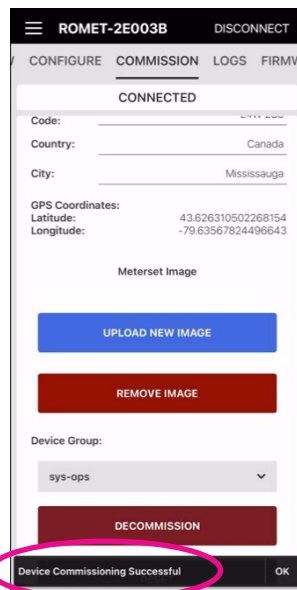
5. Select the appropriate Device Group from the dropdown menu. Available device groups are pre-set per utility organization.

Navigate to the COMMISSION tab to finalize the BrightLync commissioning process. The BrightLync module will need to be commissioned only once upon site installation.



6. Once the Device Group is selected, select the Blue 'COMMISSION' button to commission the BrightLync module.

NOTE: This activity takes approximately 20 seconds and during this time a small circling symbol will be in the center of the screen and the background grayed out.



Once the BrightLync module has been successfully commissioned, the blue 'COMMISSION' button will change to a red 'DECOMMISSION' button. A prompt of 'Device Commissioning Successful' will appear at the bottom of the screen to indicate the commissioning results.

7. Select 'OK'
8. Then select 'DISCONNECT' on the top right corner of the screen.

The commissioning process is now complete.

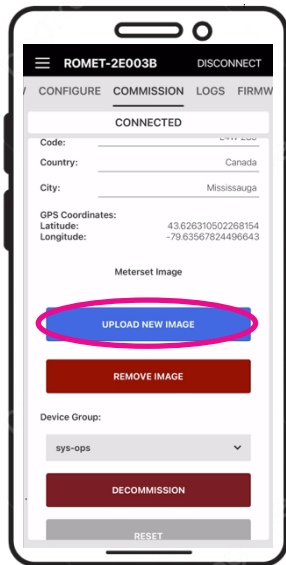
NOTE 1: The orange 'RESET' button will force a decommission function if an error occurs during any part of the commissioning process.

NOTE 2: If there are any issues commissioning the module and an error message is received (e.g., 'Unable to add device to group' or 'Unable to commission'), select the orange 'RESET' button and then select the 'COMMISSION' button. If the problem persists, refer to the troubleshooting guide.

UPLOAD A PHOTO

After the commission process is complete, you can upload a photo. The photo can be anything your company needs. For example, a photo can be of the BrightLync device, the BrightLync lot number, the meter number, the entire meter set, etc.

To upload a photo:



1. Press 'UPLOAD NEW IMAGE'



2. Take a photo.

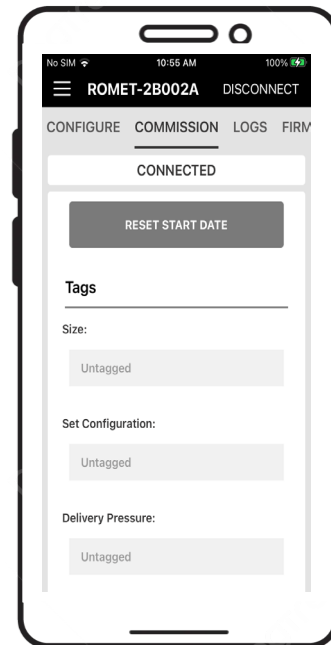


3. Then select, 'Use Photo'. The photo will appear on the commissioning screen.

Applying Tags

Right after commissioning, tag feature will be available at the bottom of the commissioning tab.

Note: Tags can be created (both predefined and custom) only on the Energy Array Device Manager.



DISCONNECT

After selecting 'DISCONNECT' you will be directed to the DISCONNECTED screen. Select the blue 'BACK TO SCAN' button at the bottom of the screen. Ensure that the device that was commissioned goes to sleep and disappears from the screen. Once the device disappears you are now ready to commission another BrightLync module.

NOTE: To discover accessible BrightLync modules for establishing a connection, click on 'SCAN' in the upper right corner to initiate the scanning process. Consult the 'LOGIN' section for the available options.



Appendix C

Energy Array Device Manager

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1. ENERGY ARRAY - HIERARCHY OF THE STRUCTURE

The system hierarchy is structured as follows:

- Company
- Utility
- Device Group

The users can be classified as

Company:

- Company Admin
- Company Viewer

Utility:

- Utility Admin
- Utility Power User

Device Group:

- Device Group Admin
- Device Viewer

2. ROLES AND PERMISSIONS

2.1 ROLES

- Company Admin – view everything on the company account, has full user permission except for creating, modifying, or deleting a company admin. The only role that can edit Company settings.
- Company Viewer – view all underlying utilities, device groups, and devices for a particular Company.
- Utility Admin – full access to the Company's Utility resources. The only role that can commission/ decommission devices.
- Utility Power User – access to specific management actions (e.g. to initiate active data pull, reboot, etc.)
- Device Group Admin – has access to a group(s) of devices within the Utility.
- Device Viewer – can view a single device.

2.2 PERMISSIONS

User permissions are determined by the role that the user has been set up with.

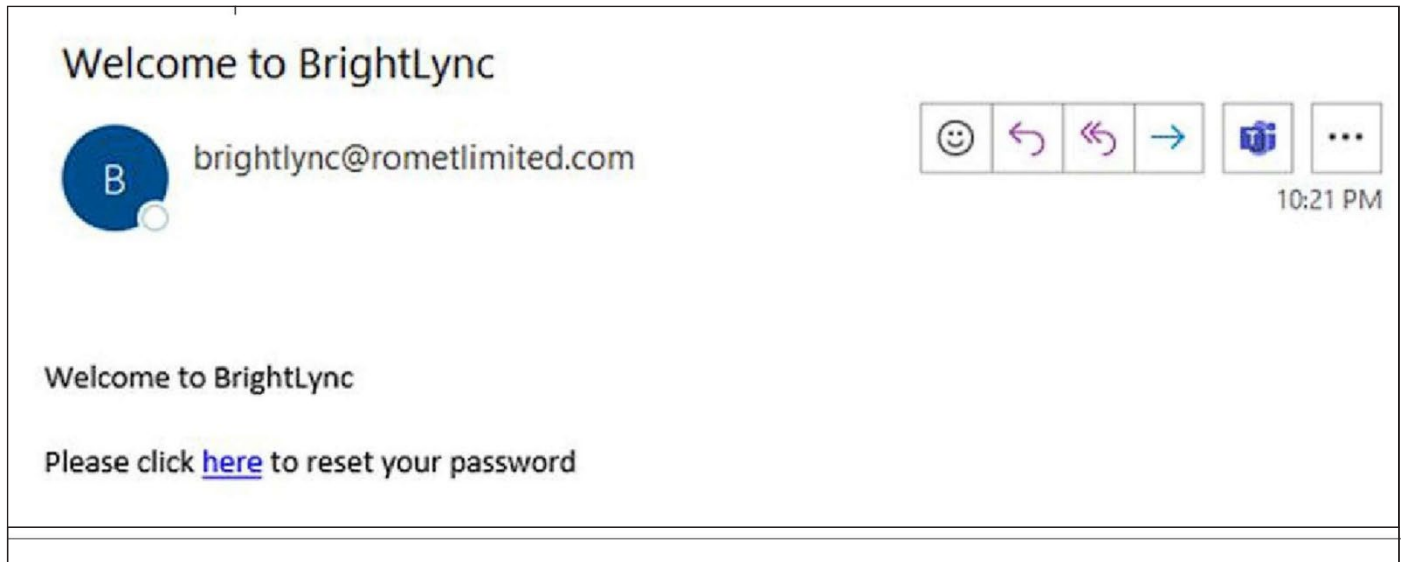
- Management Actions are only available for users at an Admin level, either Company, Utility or Device Group Admin. Permissions for these roles include the ability to install firmware, pull Asset data from the device, and export Asset data from the portal.
- Measurement (Company) Settings are available to be changed by the Company Admin. Only metric and Imperial Settings are on the portal.

3. LOGIN AND MULTI-FACTOR AUTHENTICATION (MFA)

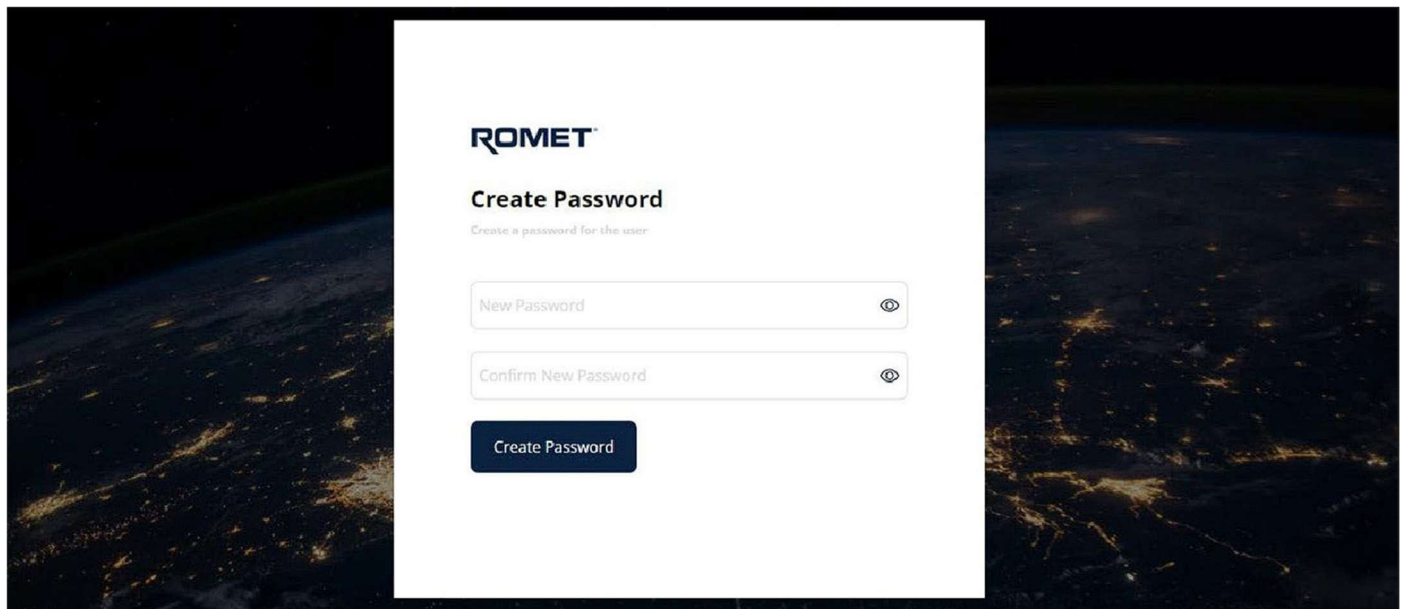
3.1 FIRST TIME LOGIN

When a user logs in for the first time, they are required to enable MFA to complete their log in.

When an account is created the user will receive an email to set the password.



When the user clicks on the hyperlink in the email, the user is directed to Energy Array Device Manager, where they can create a password.



Once the password is created, the user is directed to enable multi-factor authentication. To do this, the user must download Google Authenticator on their mobile device.

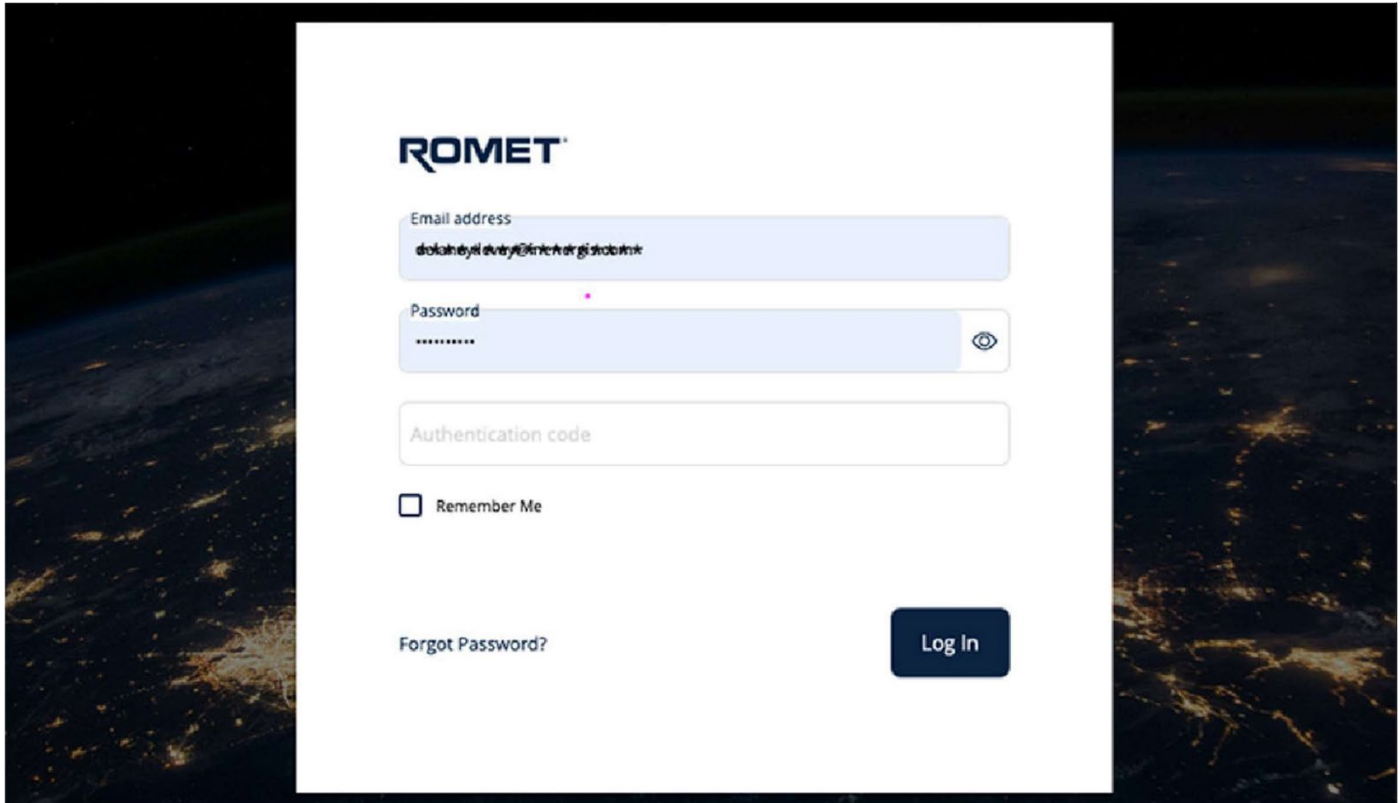
NOTE: iOS users can download it from the App Store and Android users can download it from the Play Store. If you need to use any other application for Authentication, contact your System Administrator.

To complete the setup, the user needs to

- Enter the password that was created on Energy Array Device Manager,
- Click on Generate the QR Code
- Scan the QR code through the Google authenticator lens and the code generated should be entered in the 'authentication code' field below the password field.
- Click on the 'Enable MFA' button.

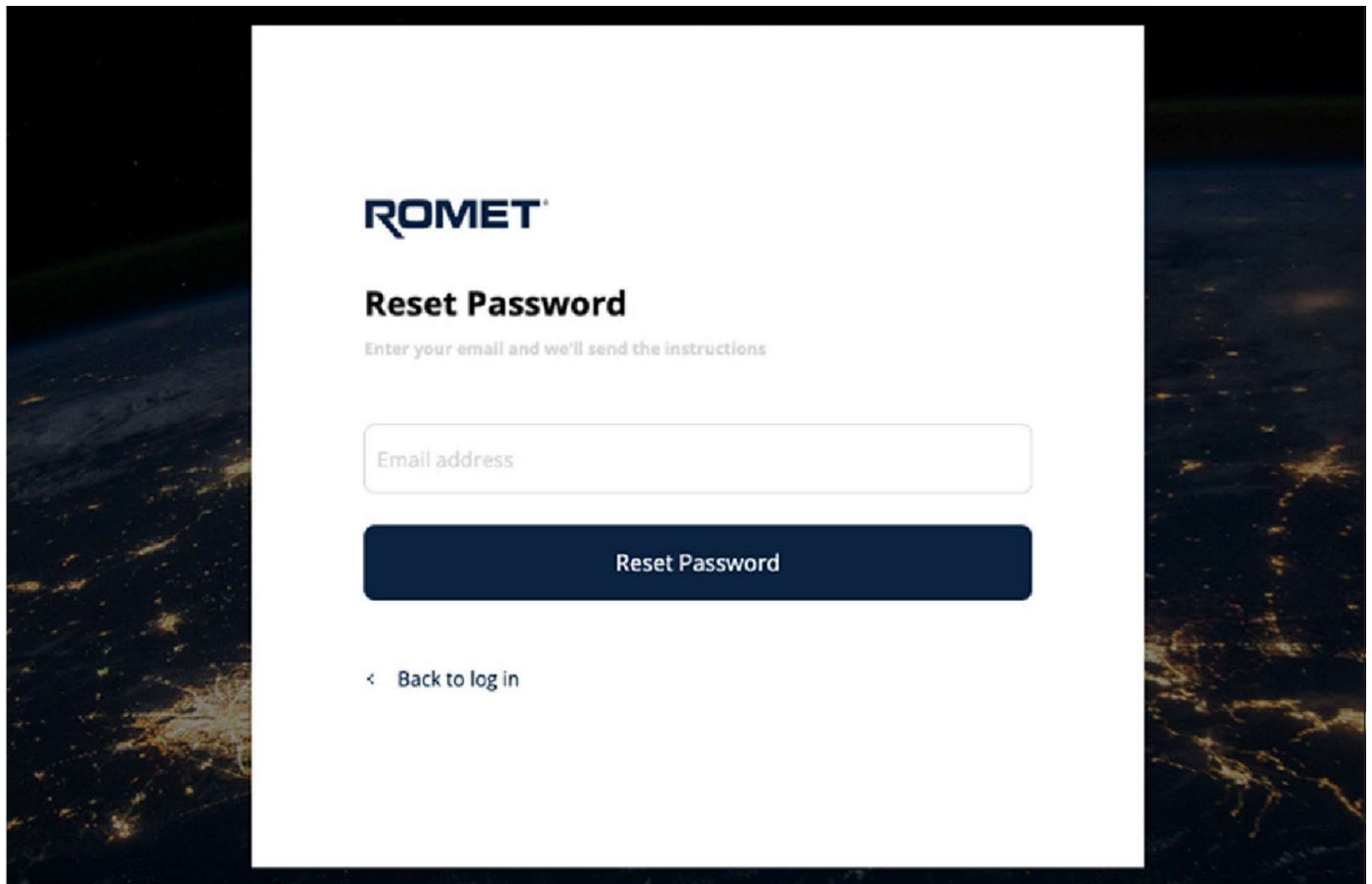
MFA is now enabled. Please proceed to the login page.

3.2 LOGIN OF A REGISTERED USER



The user should be able to log in with the registered email address and password and by entering the authentication code generated by the Google Authenticator.

3.3 FORGOT PASSWORD



ROMET

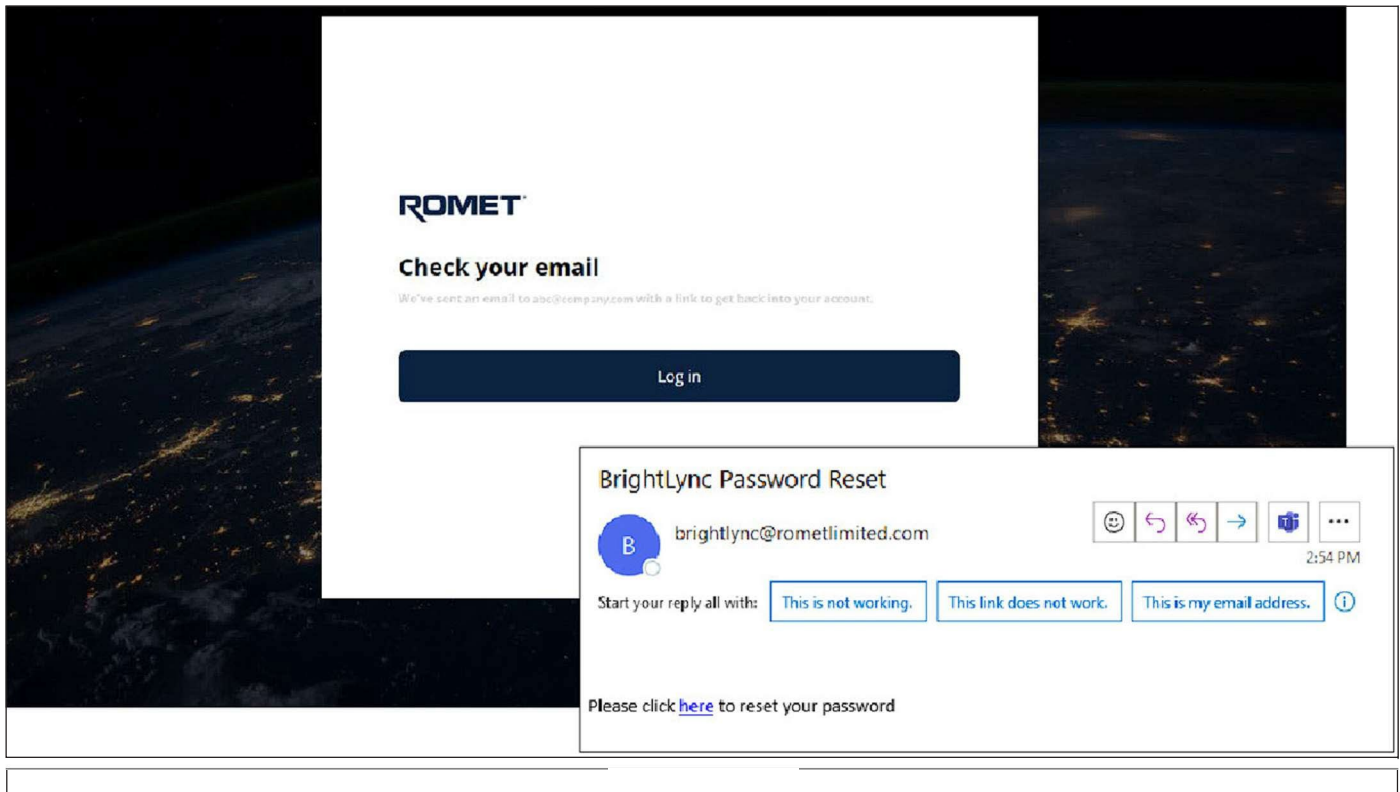
Reset Password

Enter your email and we'll send the instructions

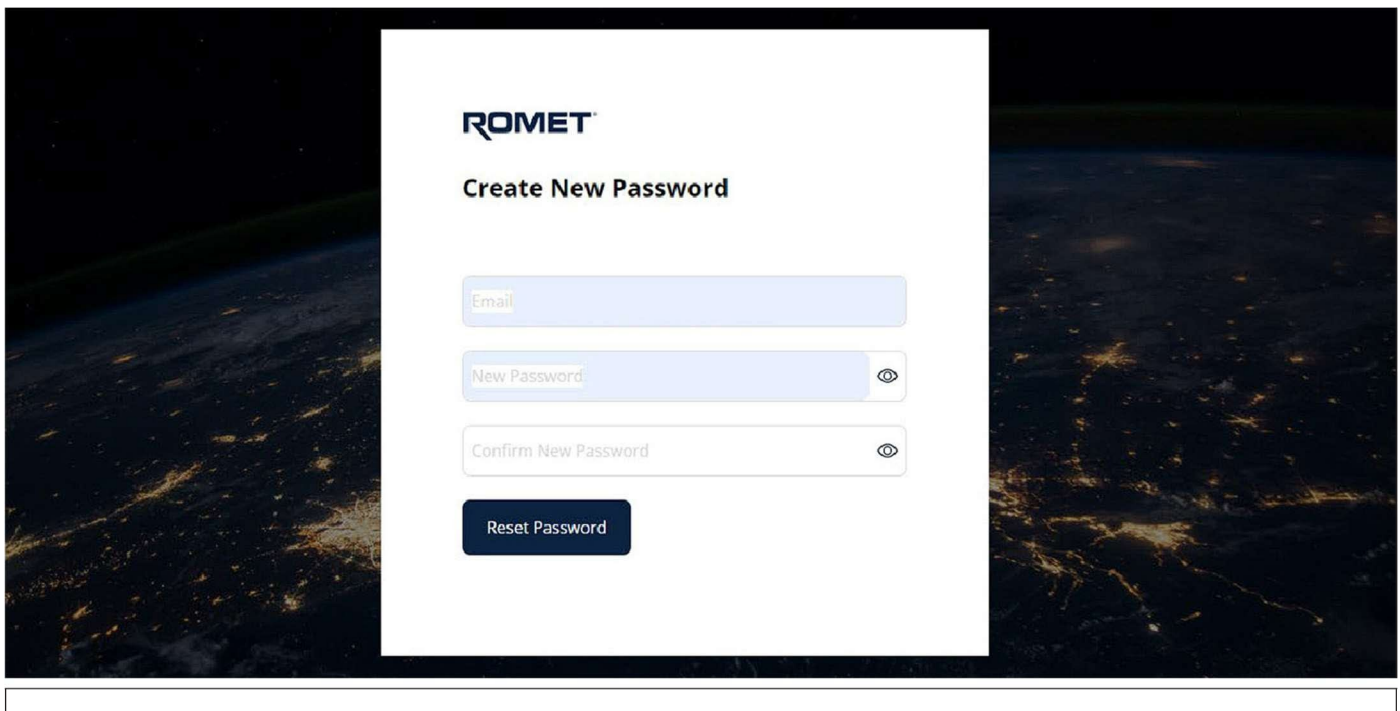
Reset Password

[< Back to log in](#)

To reset the password, the user needs to click on the 'Forgot Password' hyper-link on the page and the 'Reset Password' page will open. The user needs to enter the email address registered for their account, and a message will be sent to the email address.



The user will receive an email to reset the password.



The user will be directed to create a new password via the hyperlink in the email.

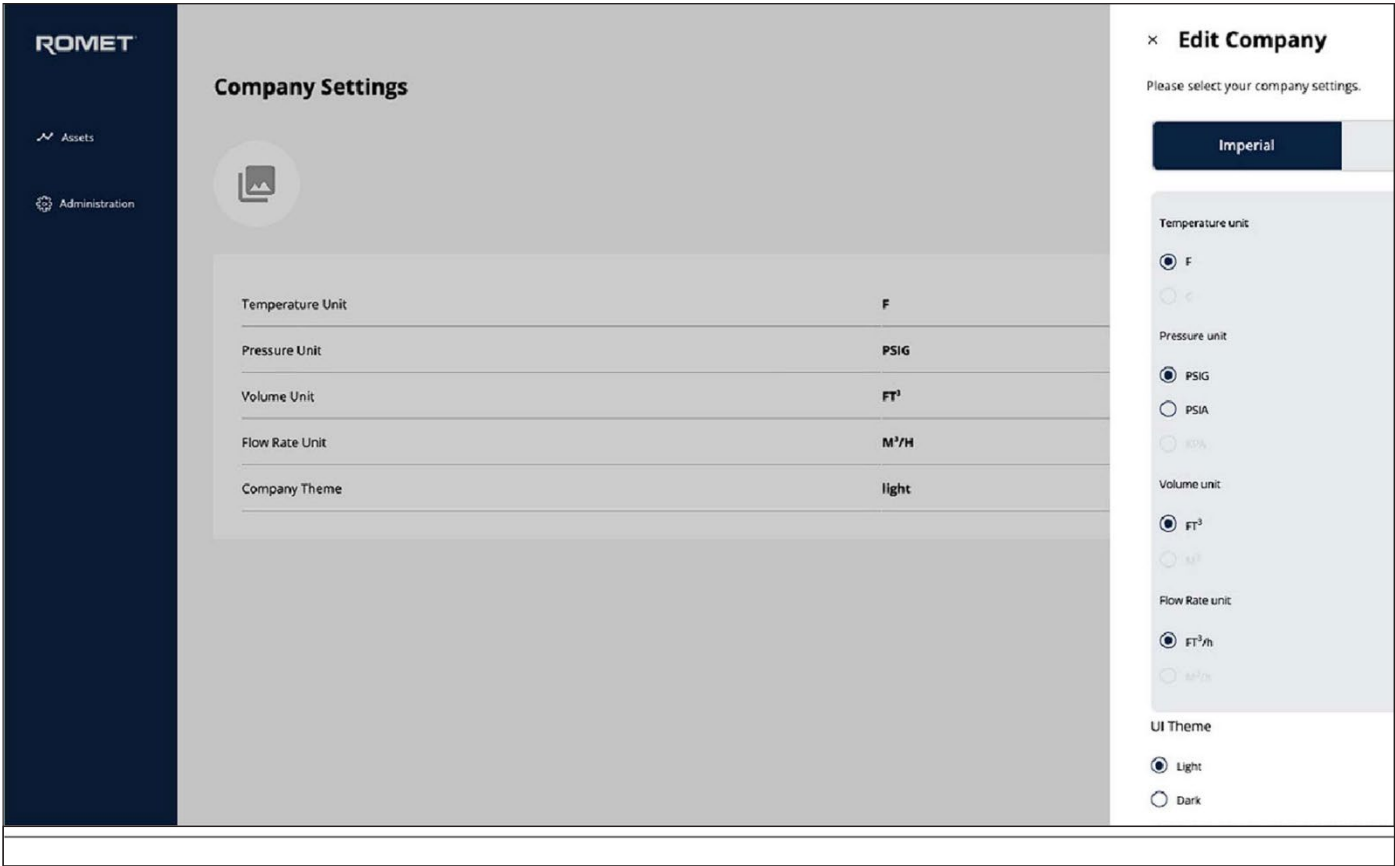
4. COMPANY SETTINGS

As part of Company Set Up, the Company Admin role has permission to configure the Company Settings.



By clicking on the settings icon, a modal will be displayed on the right-hand side of the screen, where the user can set the measurement units to either Imperial or Metric.

It is also possible to select the 'UI (User Interface) Theme' for the platform of either Light or Dark, by clicking on the preferred radialbutton setting.



Click 'Save' and all settings will be implemented.

5. ASSETS

ROMET

Assets

User

Export battery life reportExport all dataInstall firmwareDownload manual

AssetsInventoryMap

Search for Customer ID

Advanced SearchEdit columns

Customer ID	Address	Alarms	
11111138	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	5	...
11111139	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	5	...
11111113	3000 Highway 2 Road, Brampton, B5H 3T7, Canada	5	...
11111140	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	5	...
11111416	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	9	...
11111418	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	9	...
11111419	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	9	...

Rows per page: 1011-20 of 9947

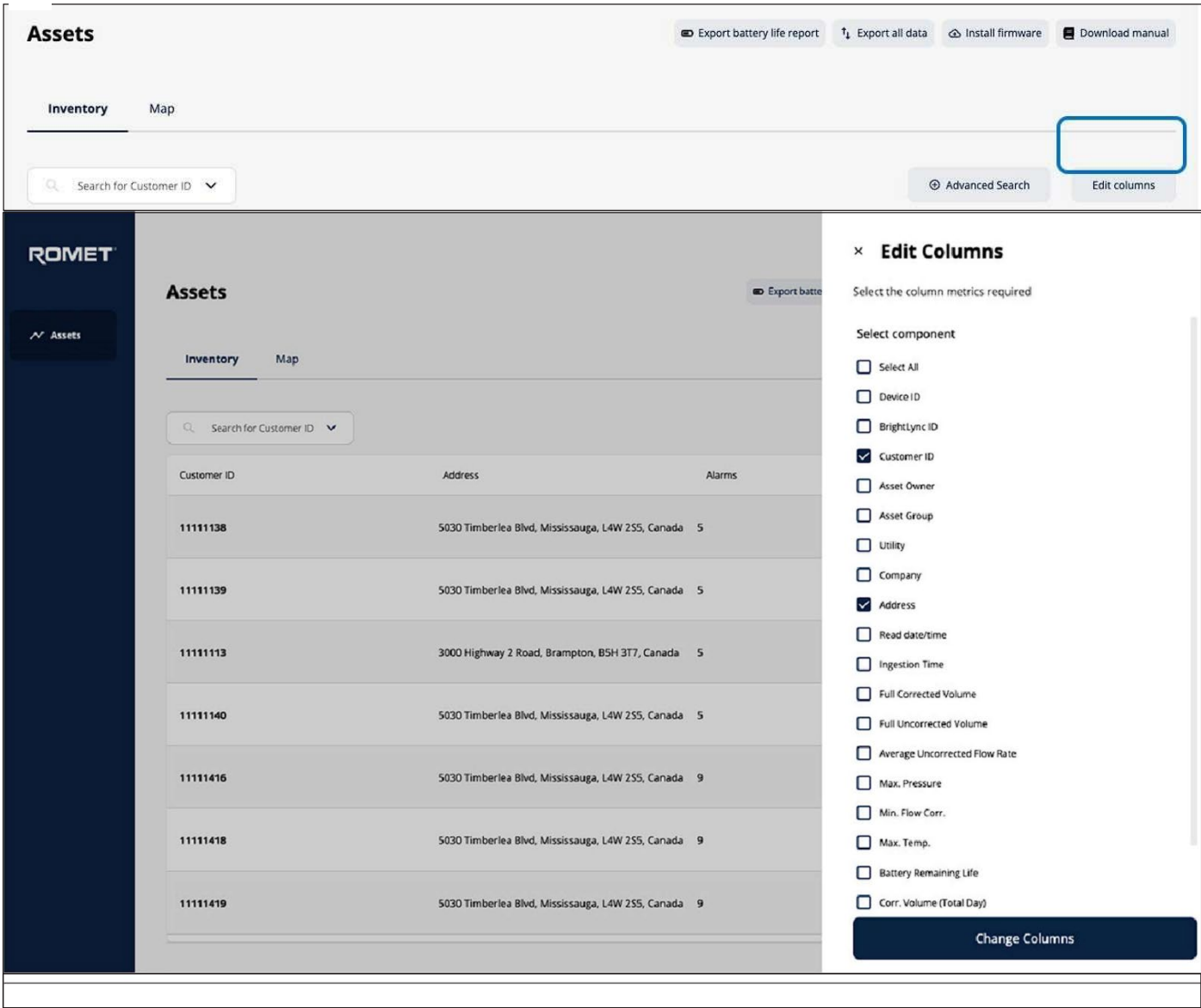
The Assets page has two tabs:

Inventory	This tab details all the required information of the assets such as Customer ID, Address and Alarms.
Map	The user can view the location of the assets on the Map. Further details on the Map functionality can be found in section 6.6.

5.1 INVENTORY

The inventory tab provides the user with access to the following functions:

5.2 EDIT COLUMNS



When the user clicks on 'Edit columns' button, a model will be displayed on the right of the screen, where the user can select the columns that they wish to be displayed on the table view of the Assets page.

5.3 ADVANCED SEARCH

Assets

Export battery life reportExport all dataInstall firmwareDownload manual

InventoryMap

Search for Customer ID

Advanced SearchEdit columns

ROMET

Assets

Assets

InventoryMap

Search for Customer ID

Customer ID	Address	Alarms
11111138	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	5
11111139	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	5
11111113	3000 Highway 2 Road, Brampton, B5H 3T7, Canada	5
11111140	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	5
11111416	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	9
11111418	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	9
11111419	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	9

Advanced Search

Customer ID

Device ID

Address

Group

Clear

Search

When the user clicks on the 'Advanced Search' button, a model will be displayed on the right of the screen where the user can enter the parameters for an advanced search. Once the parameters are entered, click 'Search'; the user will then only see on the table the devices that match the parameters entered.

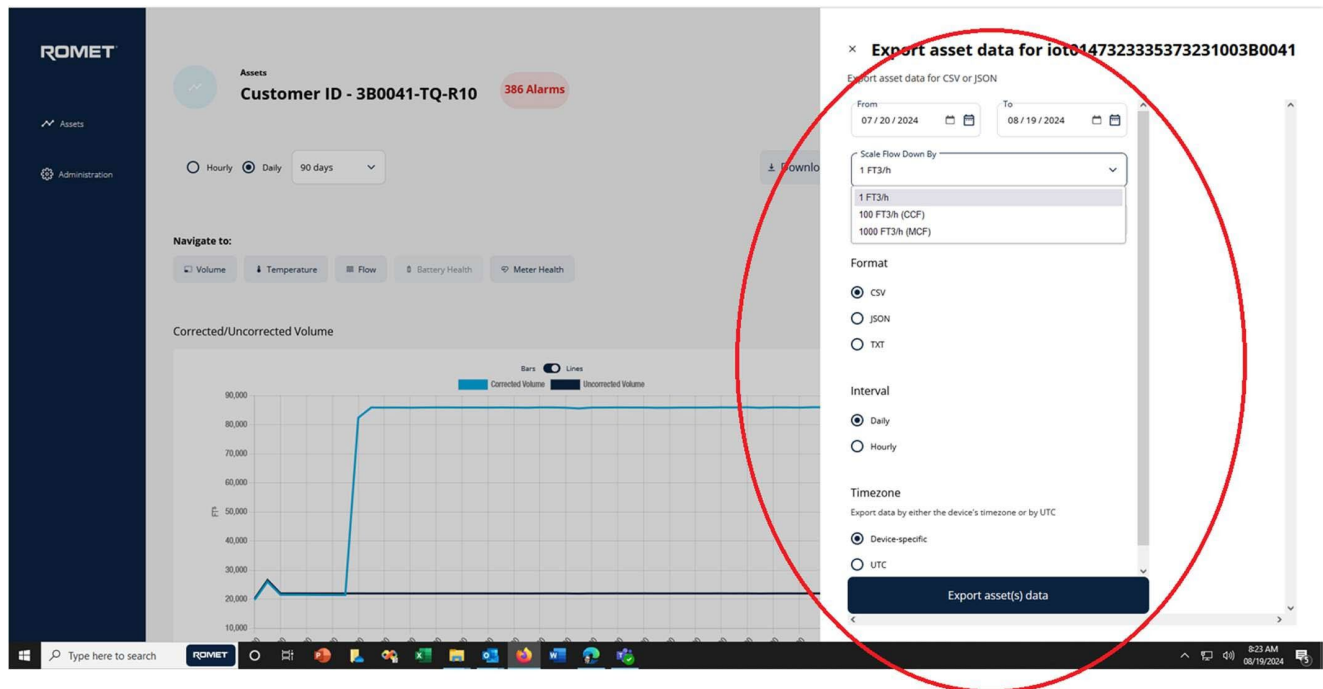
5.4 EXPORT ALL DATA

When the user clicks on the 'Export all data' button, a model will be displayed on the right of the screen where the user can enter the factors for their data export.

This includes a date selector detailing the dates 'From' and 'To' and the format and interval timescale for the data to be exported.

NOTE 1: Users have the option to export asset data in either .csv or JSON format, with the report being delivered to the email address associated with their user account.

NOTE 2: The 'From' and 'To' dates must not exceed a 31-day span. A warning message will appear for incorrectly entered dates. Able to Export data as CCF and MCF, as csv, json, txt, and export device time zone or UTC.



5.5 BATTERY LIFE EXPORT

Assets

Export battery life report

Export all data

Install firmware

Download manual

Inventory

Map

Search for Customer ID

Advanced Search

Edit columns

ROMET

Assets

Administration

Assets

Inventory

Map

Search for Customer ID

Customer ID	Address	Alarms
8888888888	1000 Trafalgar Square, Brampton, M5H 3G7, Canada	6
312311	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	5
11111120	9999 Highway 9 Square, Brampton, L5H 3T7, Canada	5
11111210	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	5
11111121	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	6
11111128	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	5
11111133	5030 Timberlea Blvd, Mississauga, L4W 2S5, Canada	132

Export battery life report for all devices

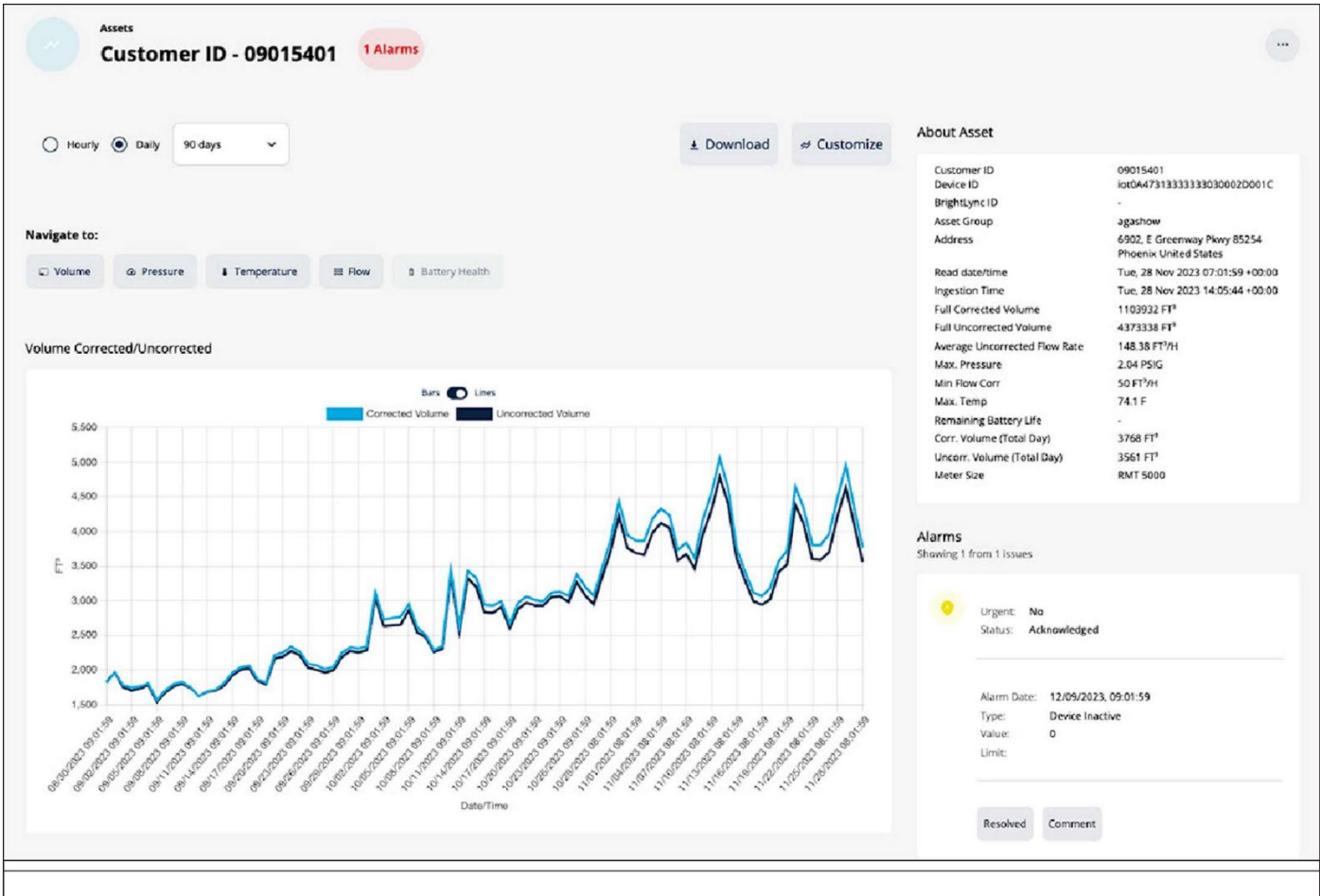
Export battery life report CSV

Export battery life report

When the user selects to ‘Export battery life report’ button, a model will be displayed on the right of the screen where the user can select to export the battery life report.

The report will be sent to the registered email address on the user account.

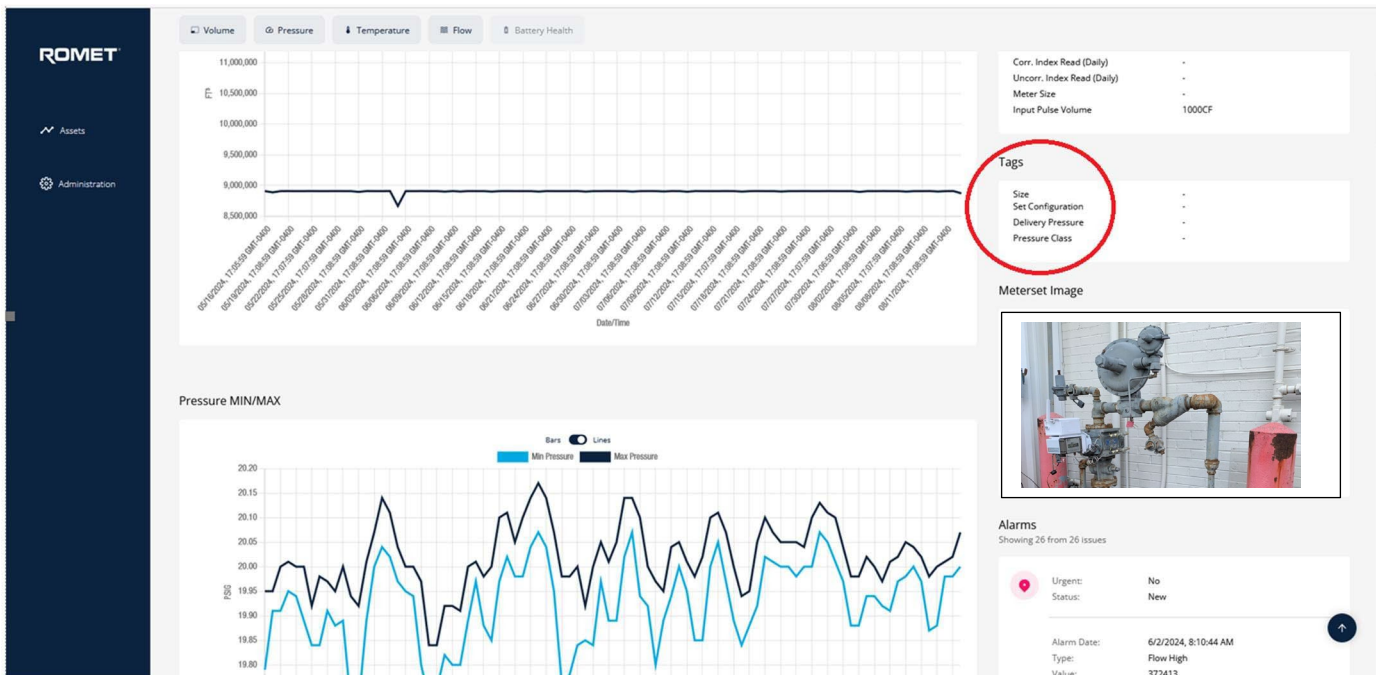
6. ASSETS PAGE



When the user clicks on any asset within the table view, the asset page with all the relevant information for the selected asset will be displayed.

The information displayed provides an overview of the measurement data for the device including volume, pressure, temperature, and flow; along with the remaining battery life of the device, where the device is located, and the date/time stamp of the data.

Device Tags



Users can use tag devices on the Asset Configuration page using either Predefined Tags or Utility-specific Tags. Utility-specific Tags can only be created or deleted by a Utility Admin user. Predefined Tags are Meter Size, Rate, Set Config, Delivery Pressure, Network Location, and Pressure Class.

Utility Admins can mass import/export tags by clicking the “Sync” button and updating the schema.

The screenshot shows the 'Utility Tags' configuration page in the ROMET interface. The sidebar on the left is identical to the previous screenshot. The main content area has a top bar with 'Assets' and 'Tags' tabs, with 'Tags' being the active tab. Below the tabs are buttons for 'Export meter health report', 'Export battery life report', 'Export all data', 'Export all alarms', and 'Download manual'. The 'Utility Tags' section includes a 'Select utility' dropdown menu with 'mi_dev_romettd_sls' selected. Below this are two sections: 'Location' and 'Regulator', each with a 'Delete' button. The 'Location' section lists 'OUT-Right', 'OUT-Left', 'OUT-Back', 'OUT-Front', and 'AGMSC'. The 'Regulator' section lists 'Pilot-Operated' and 'Direct-Operated'. Each item in these lists has edit and delete icons. A large blue 'Sync' button is located at the bottom right of the page.

Users can edit device group settings.

ROMET

Assets

Administration

Temperature Unit	F
Pressure Unit	PSIG
Index Read Unit	FT ³
Flow Rate Unit	FT ³ /h
Company Theme	light

Device Group Settings

PSIA

Temperature Unit	-
Pressure Unit	-
Index Read Unit	-
Flow Rate Unit	-

×

Edit Device Group Settings

Set temperature unit

☒ F

☐ C

Set pressure unit

☐ KPA

☒ PSIA

☐ PSIG

☐ N/A

Set index read unit

☒ FT³

☐ M3

Set flow rate unit

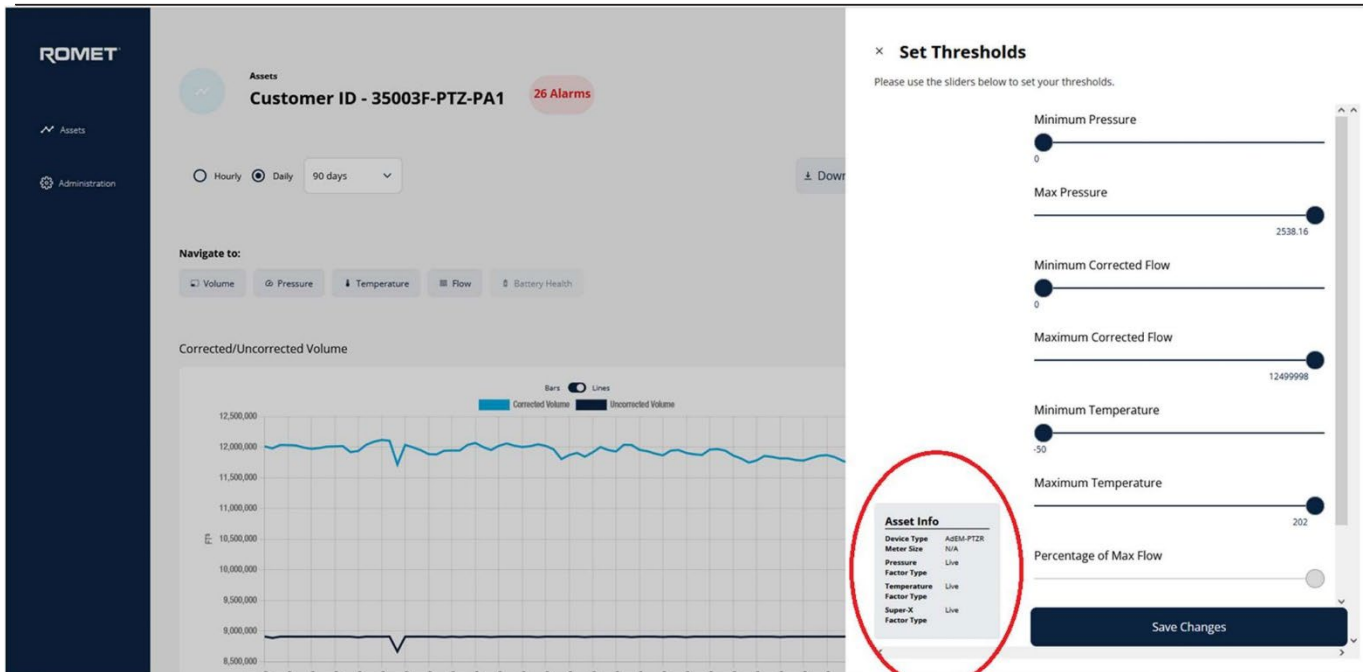
☐ M3/H

☒ FT³/H

Set voltage unit

☒ V

Edit Device Group Settings



Set Threshold screen. Device Type and Meter Size and Factor Types.



Assets

Customer ID - 11111120

5 Alarms

☐ Hourly

☒ Daily

✓ 90 days

Month vs Last

13 months

Custom

The page also contains several useful graphs, with the ability to be view over varying time intervals (Daily or Hourly), or over multiple time periods (90 days, Month vs. Last, a 13-month period or Custom). The ability to view over a 13-month period, enables the user to view a comparison of the current month data with the previous year's same month data.



Assets

Customer ID - 09015401

1 Alarms

☐ Hourly

☒ Daily

90 days

Navigate to:

Volume

Pressure

Temperature

Flow

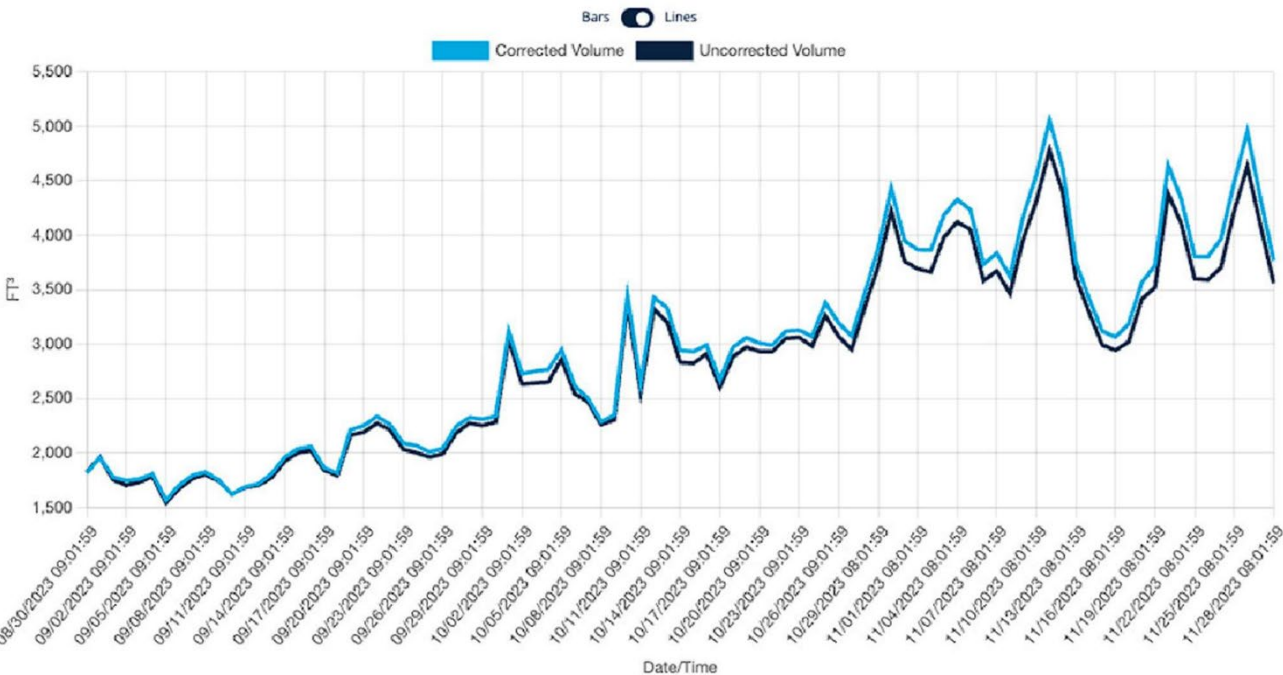
Battery Health

The user can navigate to the required graphs via two methods, either scrolling down the page, or via the hyperlink navigation buttons located at the top of the page

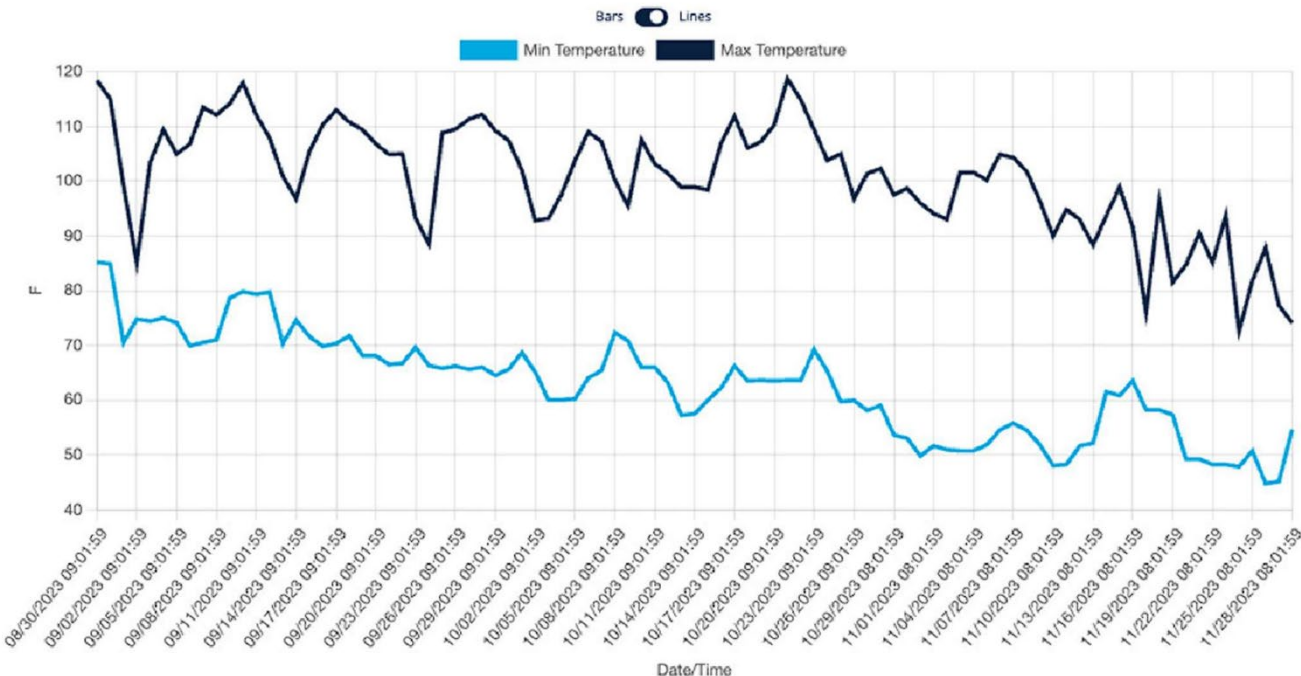
When selected, each button allows the user to be directed to the respective available graph.

Bars ☒ Lines

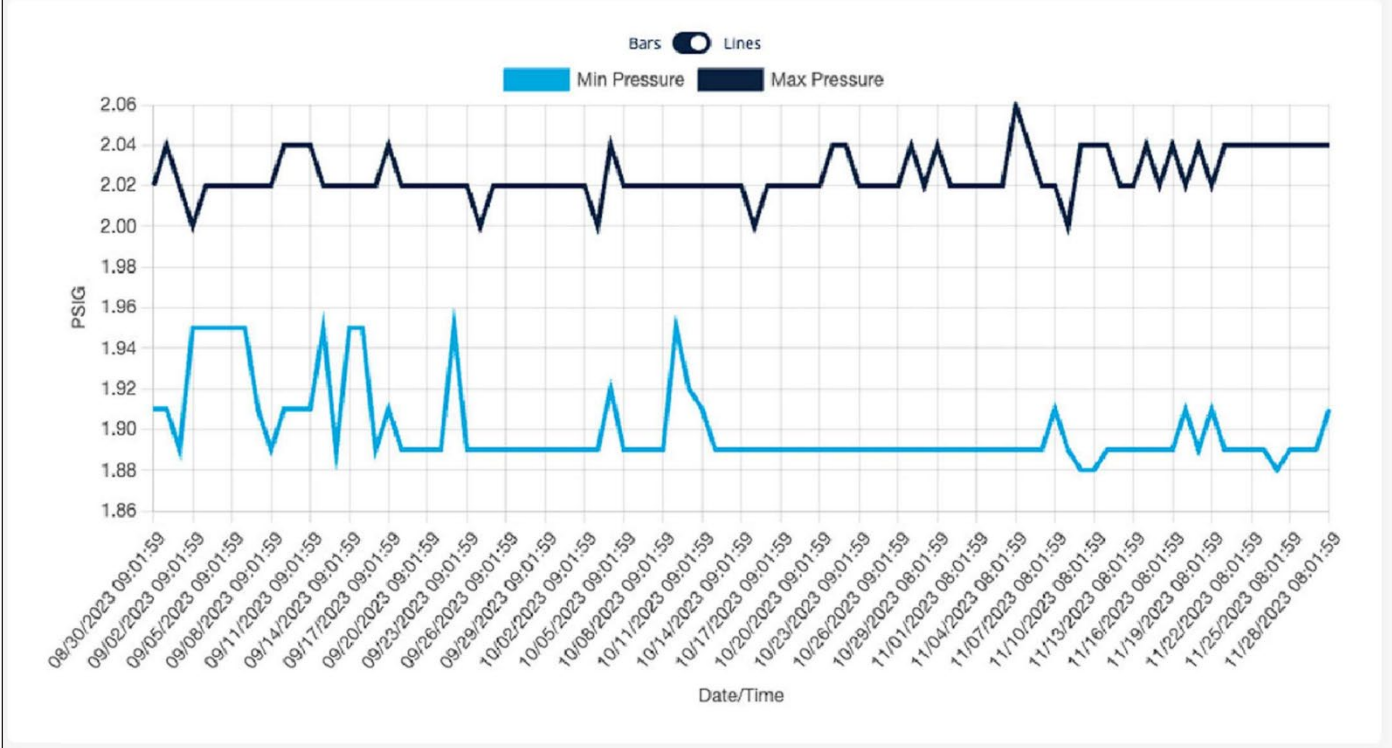
Volume Corrected/Uncorrected



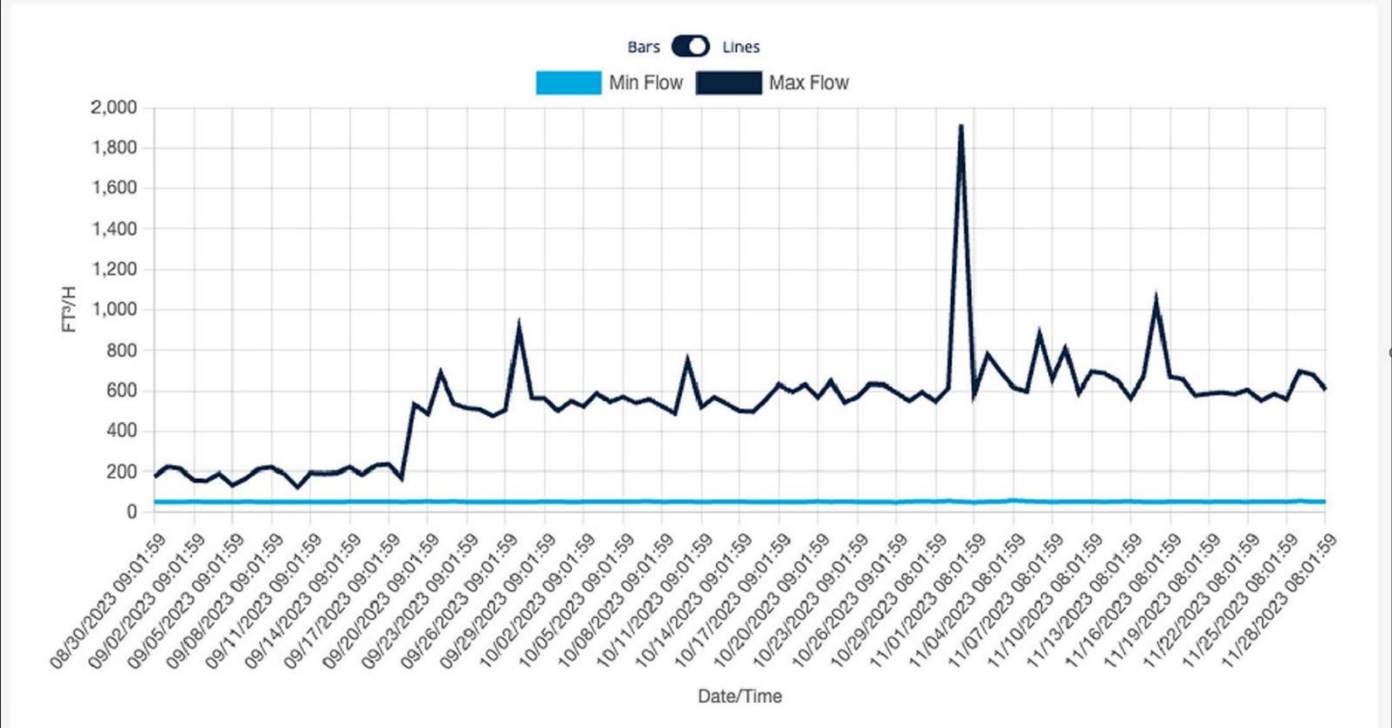
Temperature MIN/MAX



Pressure MIN/MAX

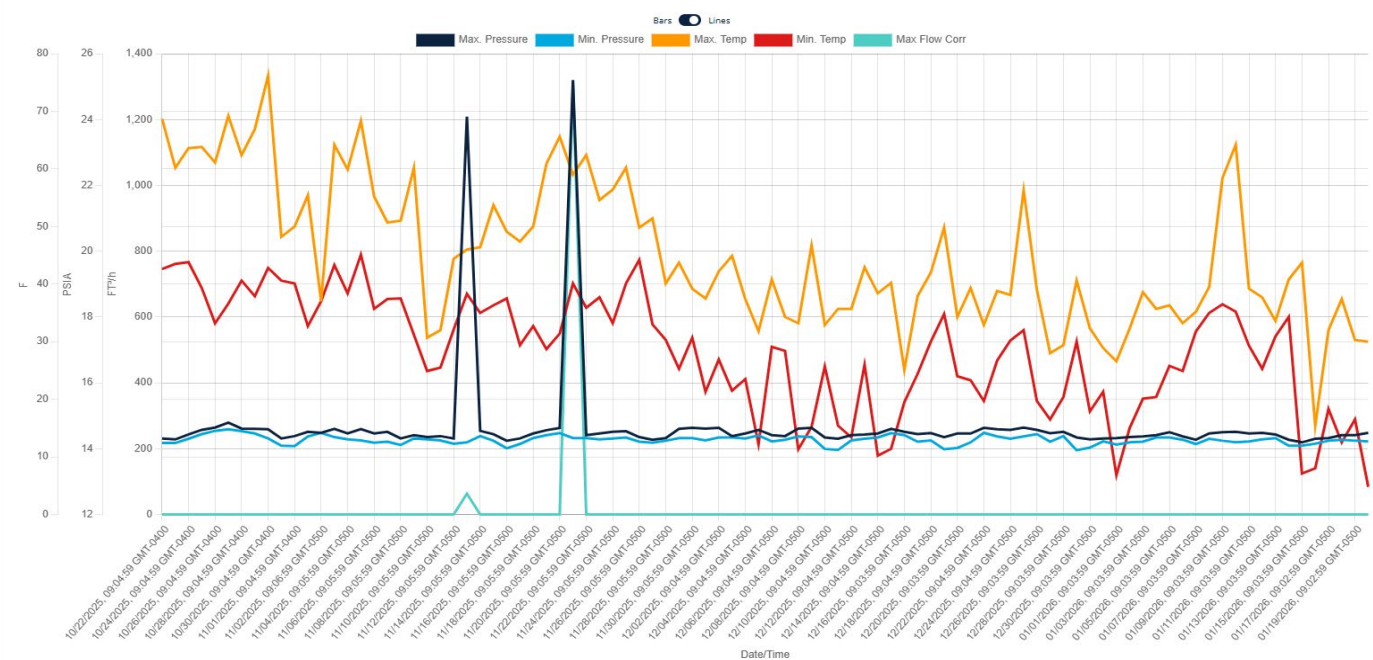
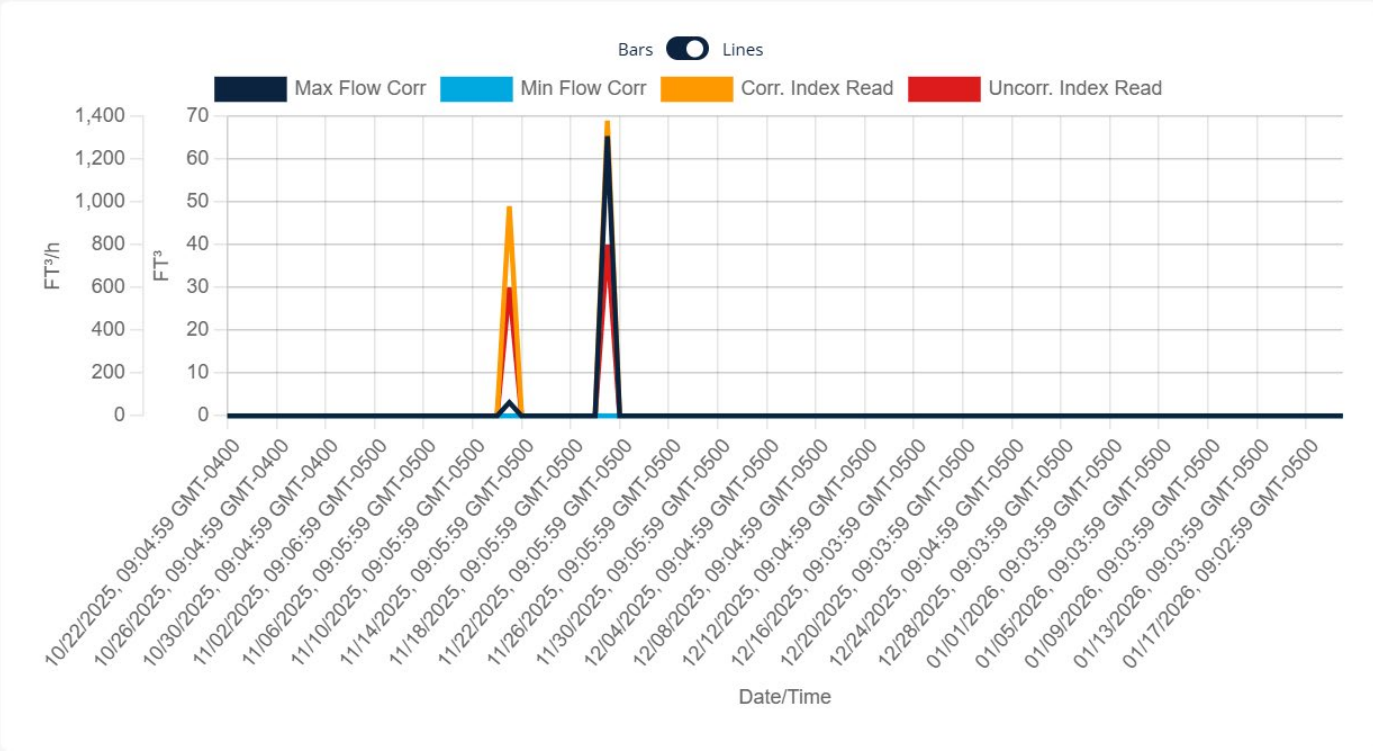


Flow Correction MIN/MAX



The user can now create **customized graphs** by selecting multiple parameters with enhanced view using multiple colors to differentiate between values.

Graph custom 1



6.1 ALARMS

From the Asset page, it is possible for the user to manage any alarms that may have occurred on the device.

Alarms

Showing 1 from 1 issues



Urgent: No

Status: Acknowledged

Alarm Date: 12/09/2023, 09:01:59

Type: Device Inactive

Value: 0

Limit:

Resolved

Comment

EA026

Asset Page

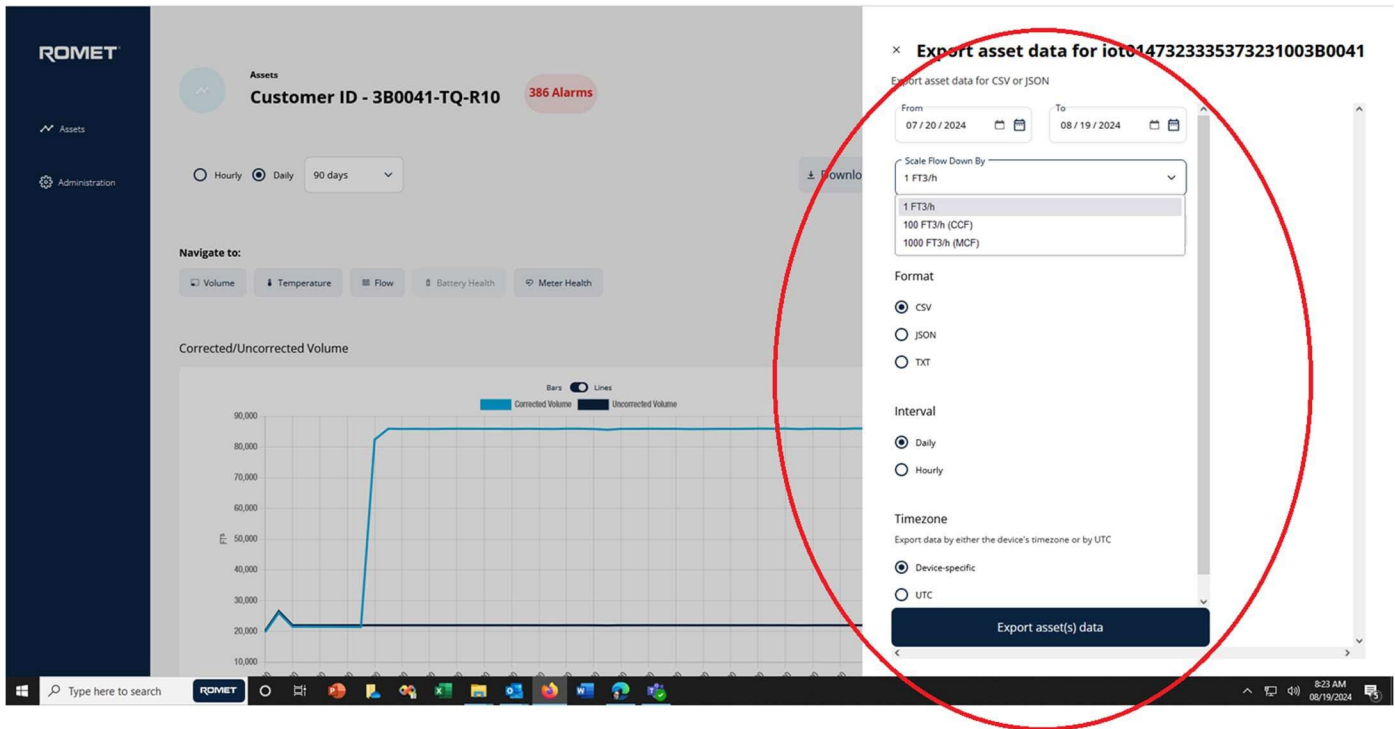
The user can either acknowledge, or resolve the alarm, including adding comments with explanatory notes if required.

6.2 ALARM STATUS

The status of the alarms are as follows:

- Active alarms are indicated in the color 'Red',
- Acknowledged alarms are indicated in the color 'Yellow'.
- Resolved alarms are indicated in the color 'Green'.

6.3 EXPORT ASSET DATA



The user can export asset data and set the interval. Export data as CCF and MCF, as CSV, JSON, txt, and export device time zone or UTC.

NOTE: refer to the information notes in section 6.4. Data will ONLY be exported for the selected asset.

6.4 ASSET CONFIGURATION

×

Asset Configuration

Site

AdEM

BrightLync

Volume Parameters

Corrected Volume Index Length

5 Digits

Corrected Volume Units

100 FT³

Corrected Volume Index Value

1

Uncorrected Volume Index Length

5 Digits

Uncorrected Volume Units

100 FT³

Uncorrected Volume Index Value

33187

Atmospheric Pressure

Standard Value Min=10 Max=16

13.73

Base Gas Pressure

Standard Value Min=10 Max=16

14.73

① Configuration may take up to 24 hours to get updated and reflected

Save & Close

Save & Continue

← Asset Configuration

Step 2 of 2

AdEM

BrightLync

Gas Day Start Time

01:00:00 PM Asset Local Time

Log Reporting Time

01:45:00 PM Asset Local Time

Transmission Frequency

24 Times Daily

Once Daily

2 Times Daily

3 Times Daily

4 Times Daily

6 Times Daily

8 Times Daily

12 Times Daily

24 Times Daily

Asset Info

Device Type

AdEM PTZ

Meter Size

RM 600

Pressure Factor Type

Live

Temperature Factor Type

Live

Super-X Factor Type

Live

① Configuration may take up to 24 hours to get updated and reflected

Save

The following user roles have the permission to configure both Adem and BrightLync devices:

- Company Admin,
- Utility Admin,
- Device Group Admin

The following user roles have the permission to configure both Adem and BrightLync devices:

- Device type,
- Meter Size,
- Factor Types

Within the Asset Configuration, the user can configure:

- Volume Parameters
- Alarm Parameters
- Other Parameters including Gas Mole %, Gas Specific Gravity

NOTE: Asset Configuration settings may take up to 24 hours to be updated on the device, and reflected in Energy Array Device Manager

6.5 SET THRESHOLDS

×

Set Thresholds

Please use the sliders below to set your thresholds.

Min - Max Pressure

0.00

2030.53

Min - Max Corrected Flow

0

1920

Min - Max Temperature

0.0

161.6

Percentage of Max Flow

50

Remaining Months of Battery Life

12

Save Changes

The Utility Admin user only has the permission to set thresholds for each asset individually.

Assets

Customer ID - 09015401

1 Alarms

Hourly

Daily

90 days

Download

Customize

Navigate to:

Volume

Pressure

Temperature

Flow

Battery Health

About Asset

Customer ID

Device ID

BrightLync ID

Asset Group

Address

Read date/time

Ingestion Time

09015401

iot0A47311

-

agast01

6902, E Greenway Pkwy

85254 Phoenix United States

Tue, 28 Nov 2023 07:01:59 +00:00

Tue, 28 Nov 2023 14:05:44 +00:00

...

Install Firmware

Pull Data

Export Asset Data

Asset Configuration

Set Thresholds

The option will be displayed via navigating to the options button in the top right-hand corner and can be selected from the dropdown menu.

6.5.1 IMPACT OF THRESHOLDS

The configuration/setting of thresholds is the basis for triggering the Alarms, as described in sections 7.1 and 7.2.

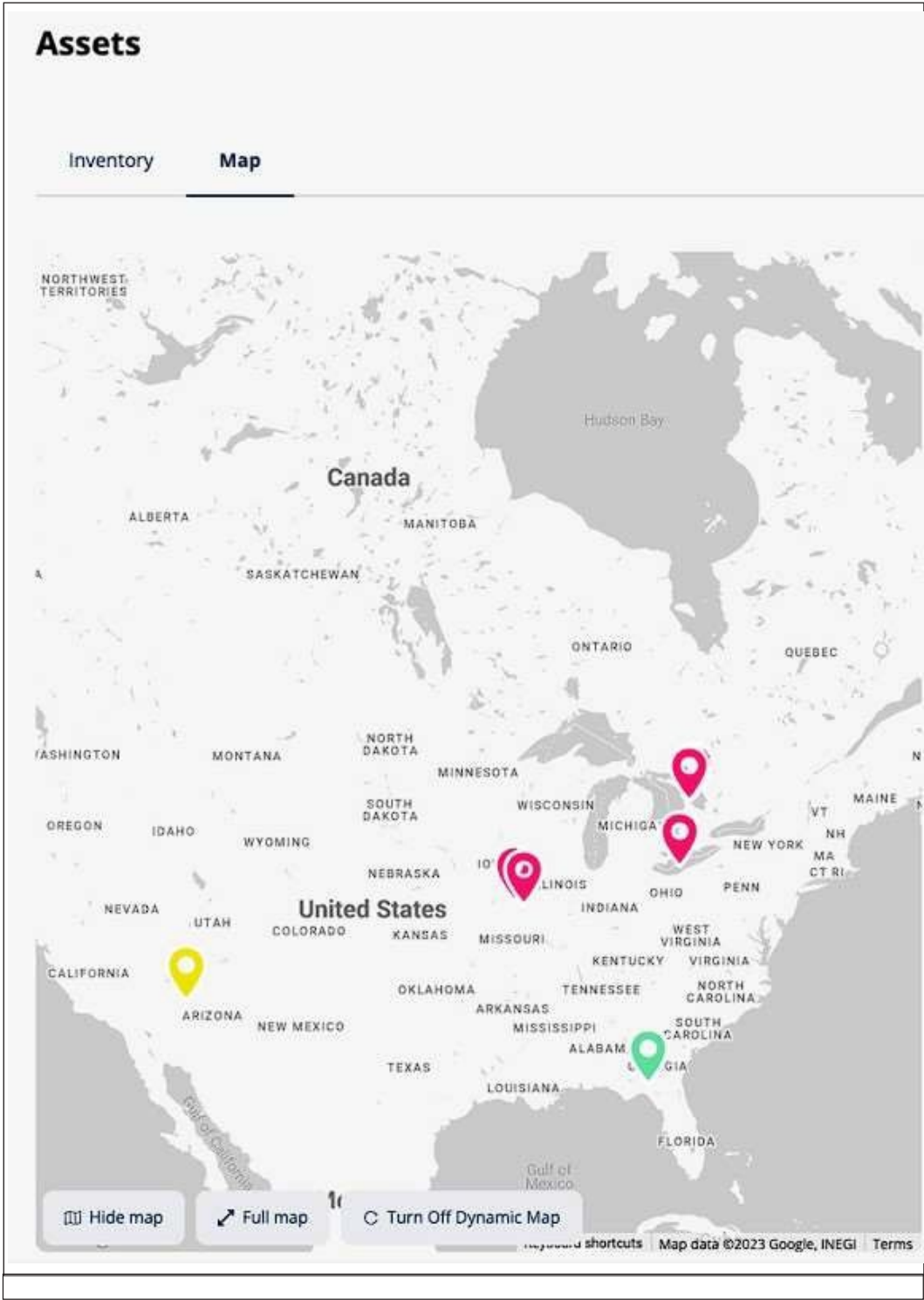
It is possible to set the threshold for:

- Maximum / Minimum Pressure
- Maximum / Minimum Corrected Flow
- Maximum / Minimum Temperature
- The percentage (%) of maximum flow
- Remaining months of battery life.

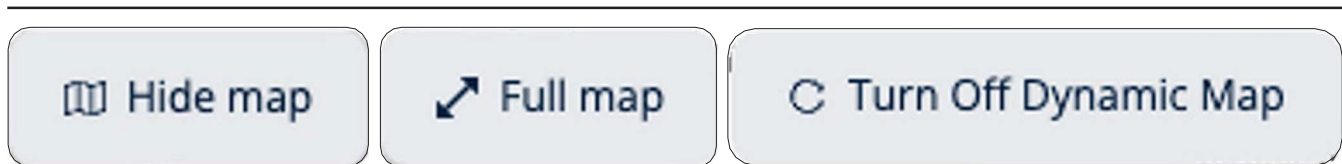
By setting thresholds for these parameters, it allows the user to be notified when one of the thresholds has been breached, triggering an alarm for the specific device it has happened on.

Setting the threshold to notify the user of the remaining battery life enables the Utility to be able to provide service & maintenance management of the device, as the battery can be replaced when required.

6.6 MAP



The user can view the map on the 'Map' tab in addition to the columns of the asset.



There are three buttons on the bottom of the map:

Hide Map—to hide the map

Full Map—to show the map on the full screen

Turn On/Off Dynamic Map—When the dynamic map is 'On', the table will actively update to display the points on the map. When the dynamic map is off, the table will show a complete static asset list.

6.7 METER SET

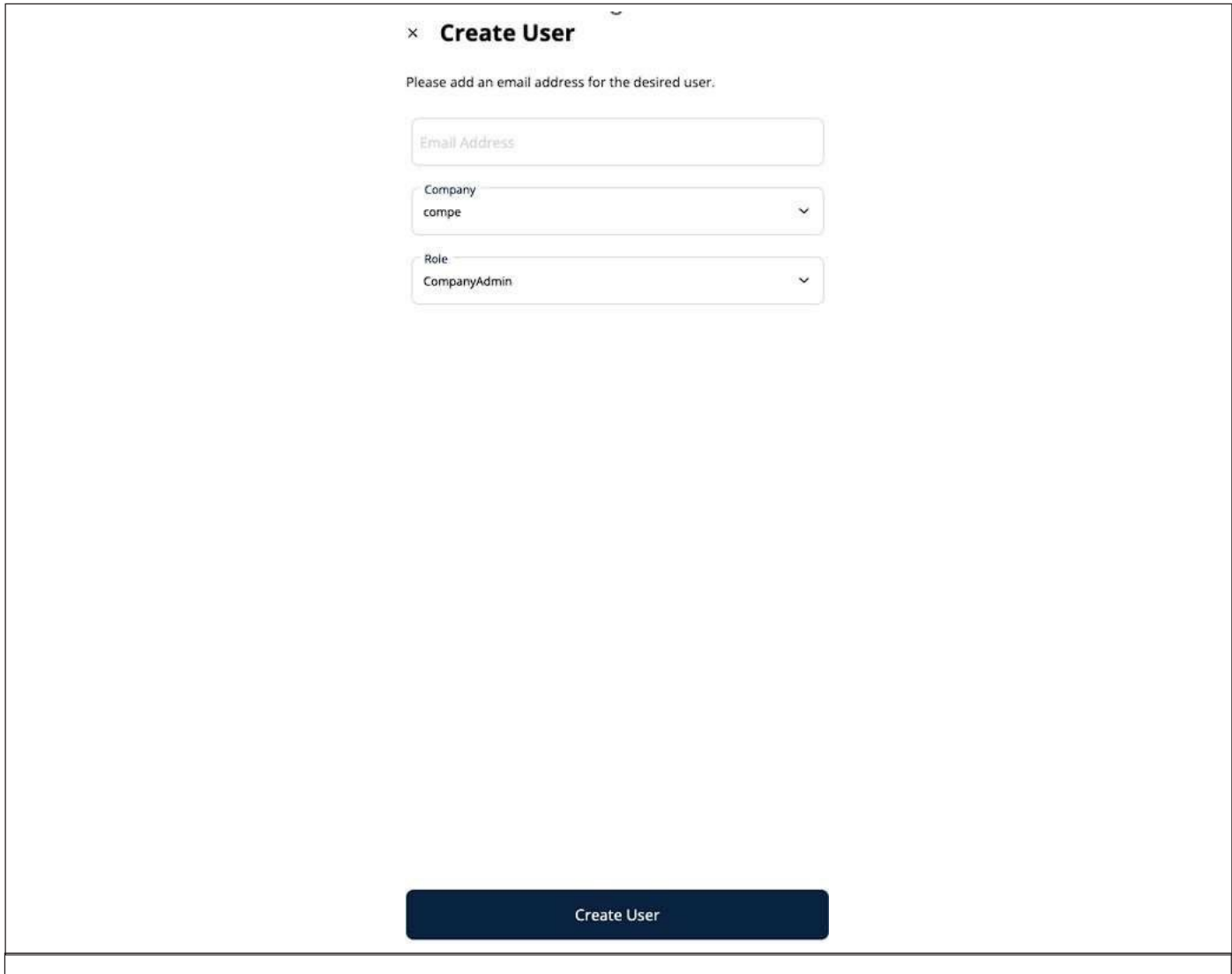
Once a device has been commissioned in the field, it is possible to store an image of the Meter Set within Device Manager.

The image is uploaded within the BrightLync App during the commissioning process, and will be displayed on the Asset page for that specific device

7. ADMINISTRATION

Administration enables two main functions, Manage Users, and My Settings.

7.1 MANAGE USERS



The screenshot shows a modal window titled "Create User" with a close button (X) in the top left corner. Below the title, there is a prompt: "Please add an email address for the desired user." The form contains three input fields: a text field for "Email Address", a dropdown menu for "Company" with "compe" selected, and another dropdown menu for "Role" with "CompanyAdmin" selected. At the bottom center of the modal is a dark blue button labeled "Create User".

- Import Users—The administrator can import the name, email address and group, and other information for the users via a .csv file upload.
- Create User—When the administrator clicks on the Create User button, a modal panel on the right-hand side of the screen will be displayed.

The Company Admin can input the email address, Company and the new users role, before clicking Create User; following which the new user will receive the welcome email as detailed in section 4.1.

7.2 MY SETTINGS

All users can enable or disable the multi-factor authentication on the 'My Settings' page.



API Instructions

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Introduction

BrightLync API allows access to collected meter and data metrics in an automated (M2M) and predictable way. The API connection process uses TLS version 1.3.

Our API follows the REST paradigm and has the following workflow: **AUTH** → **API call** (multiple).

The authentication API provides you an authentication token. This token is to be saved and used in subsequent calls until token expiration (1 hour). You can authenticate using the login user/password used for the BrightLync app and Energy Array™. Note that multi-factor authentication should be disabled on the entity being used to call the API.

Please note that *only* the following **ROLES** can make this call, programmatically:

- Company Administrator
- Utility Administrator
- Device Group Administrator

1.0 API Base URL Endpoint

<https://7v7crqbu64.execute-api.us-east-1.amazonaws.com>

1.1 Authentication

This is the first call and is necessary to authenticate the access entity. After successful authentication, a token will be returned which needs to be used for subsequent calls.

Syntax:

POST /dev/auth

```
{
  "email": "email address",
  "password": "password"
}
```

Example Body Output:

```
{
  "access-token":
"eyJraWQiOiJRWnpaeUNjaGJSUmFcL1Zna0EyV3hBVFhzS2kzcFN0TGhWRXZVRHQ0dG81ND0iLCJhbGciOiJSUzI1NiJ9.eyJzdWIiOiI4M2FjNWJjZC00OWJhLTRkZjAtOWUxYS03MDkwODcyNTk2ZjgiLCJjb2duaXRvOmdyb3VwcyI6WyJtaV9kZlZfZW5lcldwvQ29tcGFueUFkbWl1l0sImV2ZW50X2lkIjoieWYwOGNlZGYtNjUzMS00NDYwLWEyMzEtYzkyOGNmNWY3YTE2IiwidG9rZW5fdXNlIj*****",
  "expiration": 1632845005,
  "id-token":
```


- **NOTE:** tag and tag-category are independent of one another. You are not required to pass in both to search for tagged devices
- **NOTE:** both tag and tag-category are matched partially and case-insensitively. For example, passing in tag-category=CustomTagCategory will match tag categories labelled CustomTagCategory, customtagcategory, and MyCustomTagCategories

⚠ Both size and page must be passed on to enable pagination.

⚠ If a request to this API times out, it may be an indication that pagination must be applied. If pagination is already applied, the size may be too large.

Example Body Output:

```
{
  "count": 140,
  "rows": [
    {
      "id": "iot014732343536343100210021",
      "device_group_id": "mi_test_group",
      "meterId": " 210021-KPA-RC17",
      "latitude": 43.5929073366955,
      "longitude": -79.7565547427539,
      "address": "6815, Test Rd L5N 1T3 Mississauga Canada",
      "street": null,
      "city": null,
      "postalCode": null,
      "country": null,
      "has_alarm": true,
      "thresholds": [],
      "tags": {
        "predefinedTags": [
```

```
{
  "id": "53761b83-213f-4eb4-9335-7145743bcd7c",
  "name": "LP",
  "category_id": "3c41bb55-208b-4ddb-8334-e1206a1e7265"
},
"utilityTags": [
  {
    "id": "4f2f78a9-6c20-4d97-83aa-27b62f434762",
    "name": "xxxx",
    "category_id": "4c4cc0a7-4d2d-4a9d-a5e9-a4b20f8abd44"
  },
  "data": {
    "meterSize": "RM 300 ",
    "ademFirmware": "D06NM004",
    "brightlyncFirmware": "CCB_2.2.0",
    "ademModel": "AdEM-PTZ"
  }
},.....
```

2.2 Export Device Data:

The following commands are to be used to access the data for a singular device from the list of devices in the group OR to access data from all devices. The data can optionally be returned in UTC time format

Syntax (singular device):

GET /dev/device/<Iot ID>/export?frequency=daily&format=json&fromDate= 09-29-2024&toDate= 10-02-2024&forceUtc=true

Syntax (all devices):

GET /dev/devices/export?frequency=daily&format=json&fromDate=09-29-2024&toDate=10-02-2024&page=1&size=50&forceUtc=true&tag=green

Query Parameters:

- Iot ID

- Device Identifier ie. iot01473234353634310029002A
- frequency (optional) = daily | hourly
 - Daily or hourly logs
 - Default: daily.
- format (optional) = json | csv
 - The format of the exported data.
 - Default: json.
- fromDate (optional)
 - Start date of data to be included in the payload for each device.
 - Format: mm-dd-YYYY.
 - Default: 31 days before the current date.
- toDate (optional)
 - End date of data to be included in the payload for each device.
 - Format: mm-dd-YYYY.
 - Default: current date.
- size (optional)
 - Page size of each pagination result.
- page (optional)
 - Current page index in pagination
 - Minimum value: 1
- forceUtc (optional)
 - returns all the data in UTC time format (GMT+0000) if forceUtc= true
 - Default: local time format
- fromIngestionTime (optional)
 - Beginning of the time of ingestion range to be used to filter the data included in the payload for each device
 - If included, fromDate and toDate will be ignored
 - Format: Unix timestamp (milliseconds)
- toIngestionTime (optional)
 - End of the time of ingestion range to be used to filter the data included in the payload for each device
 - Format: Unix timestamp (milliseconds)
 - NOTE: If fromIngestionTime is set, toIngestionTime will default to the current time if no value is provided
- tag (optional)
 - allows you to filter only for devices that have the specified tag attached to them
- tag-category (optional)
 - allows you to filter only for devices that are tagged with any tag from the specified tag category

- **NOTE:** tag and tag-category are independent of one another. You are not required to pass in both to search for tagged devices
- **NOTE:** both tag and tag-category are matched partially and case-insensitively. For example, passing in tag-category=CustomTagCategory will match tag categories labelled CustomTagCategory, customtagcategory, and MyCustomTagCategories

Example Body Output:

```
[
  {
    "MID": " Test",
    "deviceId": "iot044732333537323100430026",
    "serialNo": "AB19252147",
    "AID": "72310015",
    "ademModel": "AdEM PTZ",
    "tags": {
      "predefinedTags": [
        {
          "id": "ff4742a9-cbaa-4884-8e98-f8eb4d31aef3",
          "name": "38M",
          "categoryId": "d8e48ecd-5d44-43ca-8503-563cb26e75b2"
        },
      ]
    },
    "time": "07/01/2025, 17:26:59 GMT-0400",
    "ingestionTime": "07/01/2025, 21:29:37 GMT+0000",
    "minPr": 12.76,
    "pressureUnit": "PSIG",
    "minPrTime": "06/30/2025, 17:02:16 GMT-0400",
    "maxPr": 12.82,
    "maxPrTime": "07/01/2025, 00:00:00 GMT-0400",
    "minFC": 9982,
    "flowUnit": "FT3/h",
    "minFCTime": "06/30/2025, 17:29:25 GMT-0400",
    "maxFC": 17535,
    "maxFCTime": "06/30/2025, 17:28:20 GMT-0400",
  }
]
```

```
"minTemp": 72.1,  
  "temperatureUnit": "F",  
  "minTempTime": "06/30/2025, 19:25:38 GMT-0400",  
  "maxTemp": 74.4,  
  "maxTempTime": "07/01/2025, 13:19:28 GMT-0400",  
  "bV": 3.65,  
  "voltageUnit": "V",  
  "ccbbV": 3.55,  
  "dayCV": "305496",  
  "volumeUnit": "FT3",  
  "dayUV": "169841",  
  "GDST": "17 00 00",  
  "fCV": "1903217",  
  "fUV": "1057179"  
}  
]
```

Contact Us

Please contact your Romet representative or Customer Service if you require any assistance.



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Troubleshooting Guide

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TROUBLESHOOTING GUIDE

Message	Resolution Steps
Commissioning	
Commissioning in progress	Wait for commissioning to finish (up to 3-5 minutes). Do not move away from the screen or disconnect the device.
Commissioning Not successful, please click RESET and try again.	Please select RESET. After RESET is successful, please try to commission BrightLync again. If commissioning is still unsuccessful after reset attempt, select 'DISCONNECT' on the top right corner of the screen. Select the blue 'BACK TO SCAN' button at the bottom of the screen. Ensure that the device goes to sleep and disappears from the screen. Once the device disappears you are now ready to initiate the Bluetooth pairing connection with magnet tool and try commissioning the device again.
Commission incomplete. Press RESET and try again.	
Commissioning incomplete, please select the right device group and try again.	
Resetting/Decommissioning not successful see logs for details	Retrieve logs and contact your company administrator to determine the cause
Fetch-LTE-M	
Could not read LTE-M information	Check that the BrightLync firmware version is 2.2.4 or higher. If the device is running an older version, update it to the latest firmware. After the update, ensure the device goes to sleep and disappears from the screen. Once the device is no longer visible, use the magnet tool to wake it and initiate Bluetooth pairing. Then, attempt to recommission the device. If the issue persists, contact your company administrator for further assistance.
Weak signal. Commissioning may be not successful due to the unstable network.	Wait 30 seconds and try to Fetch LTE-M again. If you receive the same message again, signal assessment is required, and this could possibly be resolved by utilizing an external antenna and/or antenna extender.
No signal. Commissioning will not be successful.	Wait 30 seconds and try to Fetch LTE-M again. If you receive the same message again, signal assessment is required, and this could possibly be resolved by utilizing an external antenna and/or antenna extender. If still not successful, further investigation of signal is required.
Permissions and Communications	
Network busy during Initialization	Let the device go to sleep, wait for 60 seconds and try again. If the issue persists, disconnect the device battery and try to reconnect after 10 minutes
Initialization Unsuccessful	Disconnect the device battery and try to reconnect after 10 minutes.
Device was busy and did not respond to the app request	Select 'DISCONNECT' on the top right corner of the screen. Select the blue 'BACK TO SCAN' button at the bottom of the screen. Ensure that the device goes to sleep and disappears from the screen. Once the device disappears you are now ready to initiate the Bluetooth pairing connection with magnet tool and try again.
Looking for Adem	Adem is busy processing. Please wait until the message disappears and try again. If the message appears again, check the connection from BrightLync to Adem
No Adem found	

File transfer not successful please try again	Select 'DISCONNECT' on the top right corner of the screen. Select the blue 'BACK TO SCAN' button at the bottom of the screen. Ensure that the device goes to sleep and disappears from the screen. Once the device disappears you are now ready to initiate the Bluetooth pairing connection with magnet tool and try again.
Bluetooth failed to write	Select 'DISCONNECT' on the top right corner of the screen. Select the blue 'BACK TO SCAN' button at the bottom of the screen. Ensure that the device goes to sleep and disappears from the screen. Once the device disappears you are now ready to initiate the Bluetooth pairing connection with magnet tool and try again.
Configuration is still in progress	General Timeout. Please exit the app, wait 5 minutes and configure again.
Invalid permission to access device	The user does not belong to the 'Device Group' that the device is commissioned to. Please contact your company administrator.
Could not read from BrightLync	The user does not belong to the 'Device Group' that the device is commissioned to. Please contact your company administrator.
Network Error, check your Wi-Fi	Check if the device has access to internet
Fetch tag categories failed	Could not retrieve tag categories after commission is completed. Select 'DISCONNECT' on the top right corner of the screen. Ensure that the device goes to sleep and disappears from the screen. Once the device disappears try to wake up the device and check under commissioning tab if the tag categories are fetched.
No parameter was changed, and it was not commissioned	Message pops up when "Configure" tab is pushed without making any changes to the AdEM or Brightlync parameters.