CommBox

Manual for use and maintenance



CommBox

Internet Access



CommBox

Manual for use and maintenance

Document Revision: 2.0, 08/2023

Software Ver: 4.6.0.35

This manual for use and maintenance is an integral part of the apparatus together with the attached technical documentation.

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1 Introduction

1.1 Disclaimer

Munters reserves the right to make alterations to specifications, quantities, dimensions etc. for production or other reasons, subsequent to publication. The information contained herein has been prepared by qualified experts within Munters. While we believe the information is accurate and complete, we make no warranty or representation for any particular purposes. The information is offered in good faith and with the understanding that any use of the units or accessories in breach of the directions and warnings in this document is at the sole discretion and risk of the user.

1.2 Introduction

Congratulations on your excellent choice of purchasing a CommBox!

In order to realize the full benefit from this product it is important that it is installed, commissioned and operated correctly. Before installation or using the unit, this manual should be studied carefully. It is also recommended that it is kept safely for future reference. The manual is intended as a reference for installation, commissioning and day-to-day operation of the Munters equipment.

1.3 Notes

Date of release: July 2010

Munters cannot guarantee to inform users about the changes or to distribute new manuals to them.

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2 Introduction to the CommBox

CommBox provides complete access to your Munters controllers, including monitoring and control capabilities, from any device, anywhere. From one computer, tablet, or smartphone, you can manage an entire network.

- Cloud-based access to controllers
 - o Multiple, simultaneous users have network access
- Multiple communication pathways:
 - o Built-in internet and telephone connectivity
 - Cellular Connectivity
- Local communication via wired or wireless communication
- Status reports provide critical information on house functions and animal statistics
- Push notifications

In addition, CommBox can act as an add-on for users wanting to add web-access to legacy Communicator units.

2.1 Ordering

Each CommBox has one of two software packages:

- Poultry (P/N: 904-07-00016 Comm-Box-POU-EN-ROT)
- Pigs (P/N: 904-07-00017 Comm-Box-PIG-EN-ROT)

These software packages are not interchangeable and cannot be converted. In addition, connecting a CommBox directly to a controller requires a Junction Box. There are two options:

- RS-232 Network: 904-99-00036 COMM-BOX -POU- JUNCTION BOX RS232
- RS-485 Network: 904-99-00037 COMM-BOX -POU- JUNCTION BOX RS485

2.2 What Comes in the Package

- CommBox
- Junction Box
- Power Supply Cables 115VAC and 230VAC
- EPROM for Communicator upgrade when connecting CommBox directly to Communicator, upgrade the Communicator software using the EPROM supplied.

3 Hardware Installation

This document details how to install Munters' CommBox unit. Installation consists of:

- CommBox Ports
- Mounting the CommBox
- Grounding
- Connecting the CommBox to the Internet
- Connecting the CommBox to a Peripheral Device
- Connecting the CommBox to a Communicator
- Connecting the CommBox to a Controller

NOTE No software installation is required.

3.1 CommBox Ports

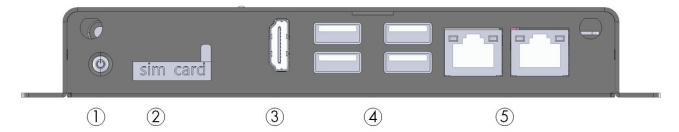


Figure 1: Front View

Number	Description	
1	On/off button	
2	SIM Card port (4G card can be used with a modem for cellular connectivity)	
3	HDMI port (refer to Connecting the CommBox to a Peripheral Device)	
4	USB ports (refer to Connecting the CommBox to a Peripheral Device)	
5	Internet ports (refer to Connecting the CommBox to the Internet)	

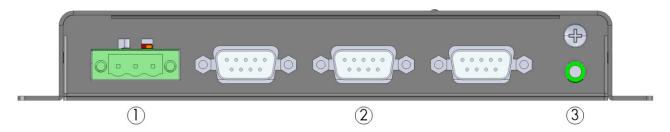
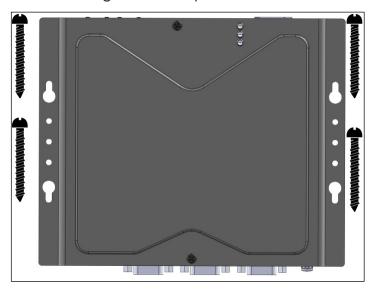


Figure 2: Rear View

Number	Description		
1 & 2	External box cable connectors		
3	Audio out		

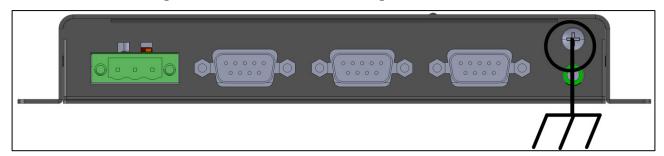
3.2 Mounting the CommBox

• Using the screws provided, mount the unit.



3.3 Grounding

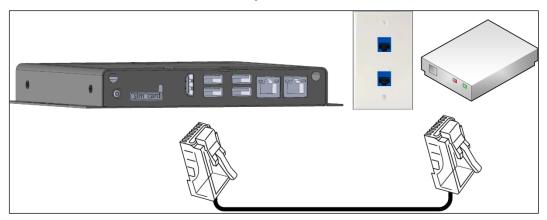
• Connect the ground cable to the dedicated ground terminal.



CAUTION The CommBox must be grounded at all times!

3.4 Connecting the CommBox to the Internet

• Connect the CommBox to your Internet connection/modem.



3.5 Connecting the CommBox to a Peripheral Device

• If required, connect a screen or mouse to the CommBox (via the USB/HDMI ports).

NOTE Connect the screen to the CommBox using an HDMI cable only. Do not use any other type of cable and an HDMI adapter.



3.6 Connecting the CommBox to a Communicator

 Connect the CommBox to a Munters Communicator a standard USB cable (supplied with the Communicator unit).



NOTE Communicator requires the Communicator Serial Card (P/N: C-COMM-SERIAL) to support the CommBox. Refer to Document #112189 for details on upgrading the Communicator.

3.7 Connecting the CommBox to a Controller or RLink

The only step in installing a CommBox that requires wiring is if the CommBox is connected directly to a controller (instead of a Communicator). In this situation the CommBox must be wired to the controller communication card, via the Junction Box.

- Controller to Junction Box Connection
- RLINK One Connection
- CommBox to Junction Box Wiring
- Wiring Topology
- Termination

WARNING! Disconnect the power before beginning!

WARNING! Only an authorized electrical technician may perform this procedure!

3.7.1 CONTROLLER TO JUNCTION BOX CONNECTION

In the controller, connect the CommBox to the controller's communication card. Refer to the following illustrations.

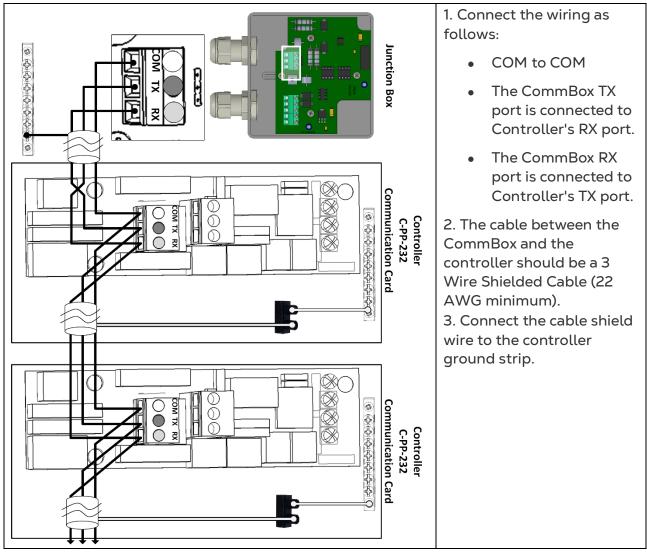


Figure 3: RS-232 Wiring

CAUTION Connect one end of the cable's shield only (the other end must be open).

Each controller should be chain connected to the same wire, resulting in a long ground cable without ground loop.

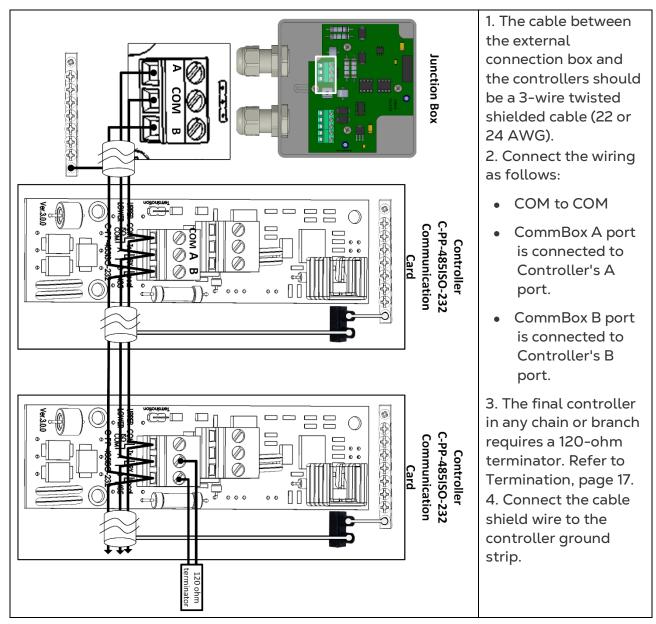
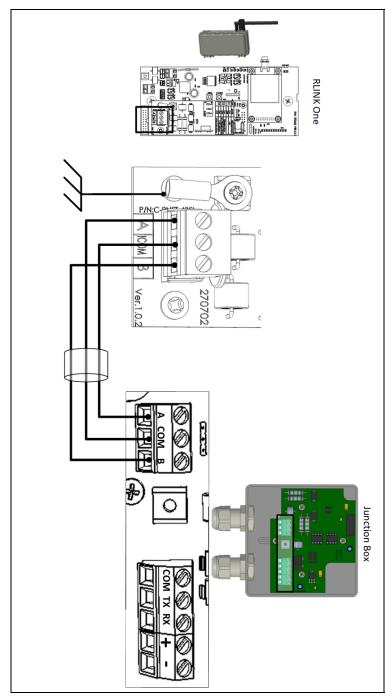


Figure 4: RS-485 Wiring

CAUTION Connect one end of the cable's shield only (the other end must be open)..

Each controller should be chain connected to the same wire, resulting in a long ground cable without ground loop.

3.7.2 RLINK ONE CONNECTION



- 1. The cable between the external connection box and the controllers should be a 3-wire twisted shielded cable (22 or 24 AWG).
- 2. Connect the wiring as follows:
 - COM to COM
 - CommBox A port is connected to Controller's A port.
 - CommBox B port is connected to Controller's B port.
- 3. The final controller in any chain or branch requires a 120-ohm terminator. Refer to Termination, page 17.
- 4. Connect the cable shield wire to the controller ground strip.
- 5. Connect the wiring according to the following table:

Port	Color Wire
СОМ	Brown
TX	Green
RX	White
+	Red
-	Black
СОМ	Shield wire

Figure 5: RLink One Wiring

NOTE: RLINK One supports RS-485 infrastructure only.

3.7.3 COMMBOX TO JUNCTION BOX WIRING

The CommBox comes with the power supply wired to the unit. See Figure 6.

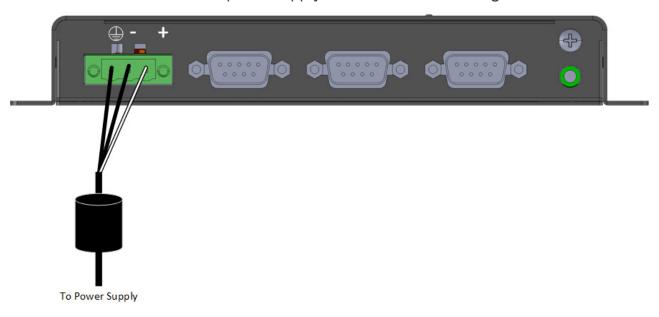


Figure 6: CommBox power supply wiring

1. Insert the Junction Box 9-Pin Connector into COM1 (Figure 7).

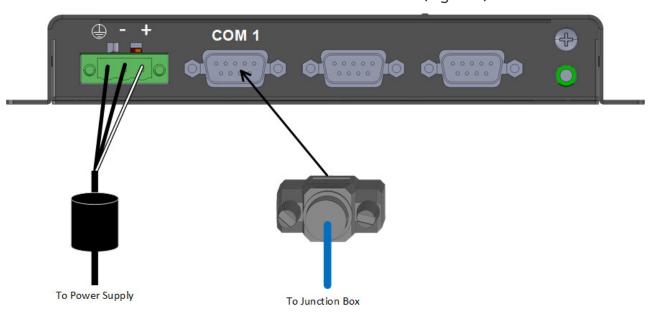


Figure 7: Insert 9 Pin Connector

2. Insert the two wires coming from the Junction Box cable into the ports (Figure 8).

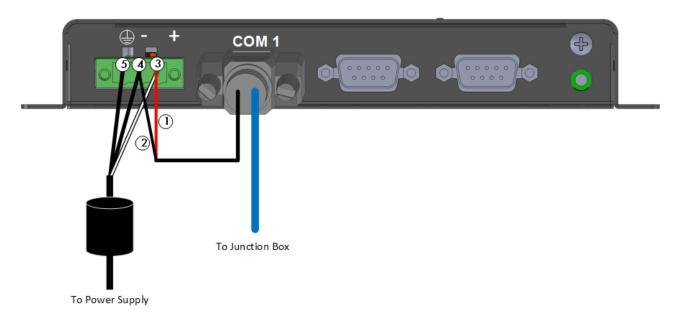


Figure 8: Junction Box Wiring to CommBox

Table 1: Wiring Details

Cable source	Color	Function	Number
Junction Box Cable	Red	+VCC (24 DC)	1
	Black	-VCC (Junction Box)	2
Power Supply Cable	White	+VCC (Junction Box) (24 DC)	3
	Black	-VCC	4
	Black	Ground	5

^{*}These wires come preconnected to the CommBox. In the event that they need to be reattached, place the white cable (#3) in the port as shown in Figure 8. Place both black cables into the ports as shown in Figure 8; either cable can be placed in either port.

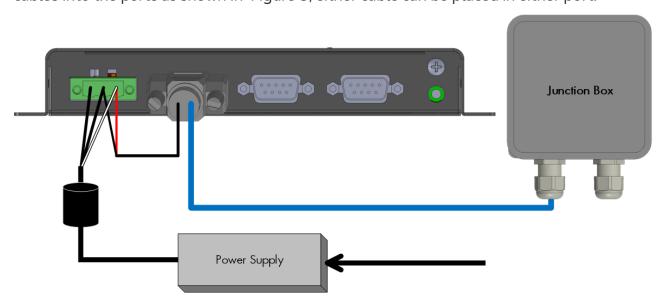


Figure 9: Power Supply – CommBox – Junction Box Setup

3.7.4 WIRING TOPOLOGY

When connecting the CommBox to controllers via an RS-485 infrastructure, use one of the following allowed topologies to ensure signal integrity.

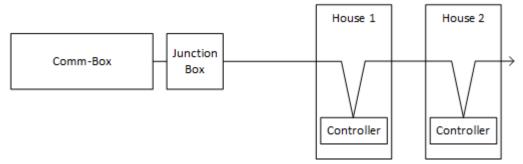


Figure 10: Direct connections

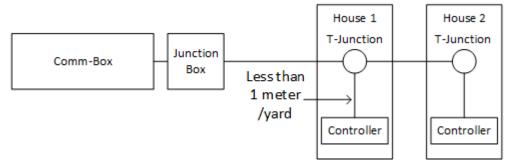


Figure 11: T-Junction (permitted)

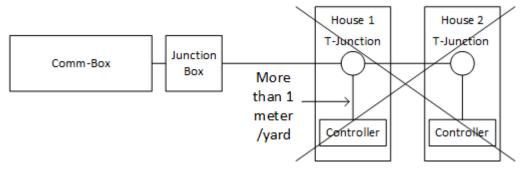


Figure 12: T-Junction (not permitted)

NOTE: When using RS-232, there is no restriction on the distance between the T-Junction and the controller.

3.7.5 TERMINATION

Termination, installing 120-ohm termination resistors at the beginning and end units of each chain of CommBox and controllers, ensures reliable communication in RS-485 infrastructures. The following illustrations show where to install the resistors. Depending on the topology, install the resistors in the T-box, the terminal controller, or the Munters Repeater.

Termination is recommended when the distance between the Junction Box and the final controller is more than 50 meters/165 feet. Munters Junction Box is supplied with a jumper and a 120 ohm resistor that can be installed in those installations (the jumper is placed in the Junction Box (see Figure 18, page 19), the resistor is installed in the controller). Termination may not be required in shorter installations.

- Termination Topologies
- Termination Wiring

3.7.5.1 Termination Topologies

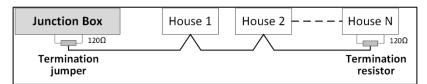


Figure 13: Topology 1: CommBox/House Termination

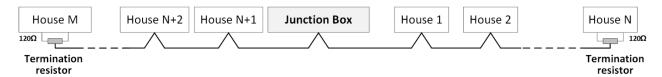


Figure 14: Topology 2: House Termination

The following two topologies require Munters RS-485 Repeaters.

CAUTION Install the repeater within one meter of the CommBox T-Box.

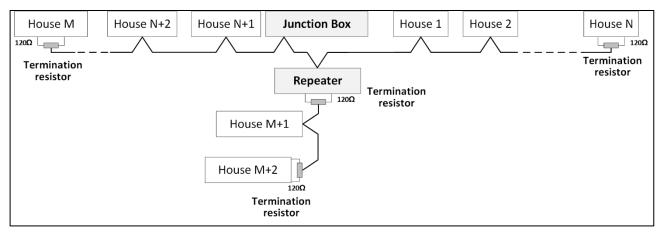


Figure 15: House and Repeater Termination

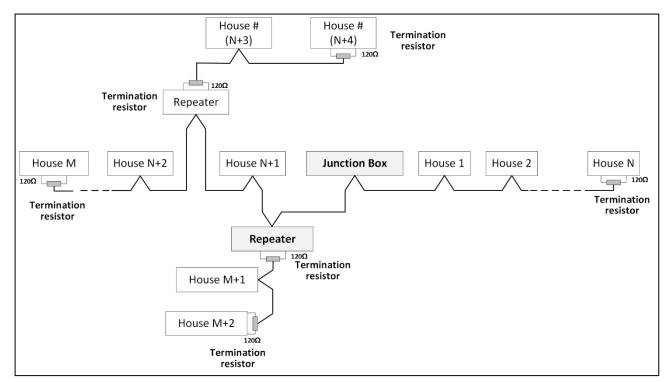


Figure 16: House and Multiple Repeaters Termination

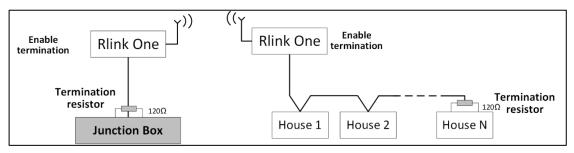


Figure 17: RLink One and House Termination

NOTE When using an RLINK One, refer to the RLINK One Manual for detailed information on RLINK One termination.

3.7.5.2 Termination Wiring

• CommBox: Install the termination resistor in the Junction Box.

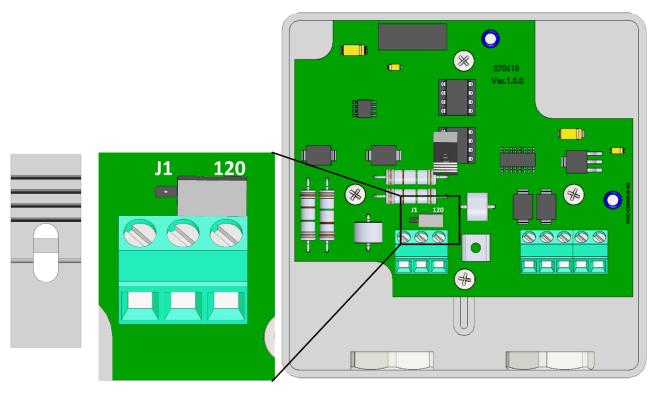


Figure 18: Junction Termination

• Repeaters: Move the S2 dipswitch on the Output card to ON.

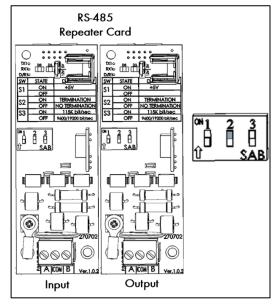


Figure 19: Repeater Termination

4 Technical Data

4.1 CommBox

Power Supply		
Power Input	• 24V DC +/-20%	
	 1 x 24V, 60W power adapter 	

CAUTION Unit shuld be powered by LimitedEnergy Source per IEC 61010-1 or Limited Power Source per IEC 60950-1 or IEC 62368-1.

Temperature Range

Operating Temperature Range	0° to +50° C / 32° to 125° F
Storage Temperature Range	-10° to +70° C / 14° to 158° F

Environmental Specifications

- Indoor use only
- Altitude: -400 m to 2000 m
- Relative Humidity: 0 95%
- Main supply voltage fluctuation up to 5%
- Overvoltage category: OVCII
- Pollution degree: PD2
- Ingress Protection: IPXO

Housing

Metal Box Dimensions (W x H x D) 162 x 26 x 150 mm (without wall-mount bracket)

Certification









4.2 Junction Box

Power Supply			
Junction Box Power Input	24 VDC, 30 mA		
CAUTION Unit shuld be powered by LimitedEnergy Source per IEC 61010-1 or Limited Power Source per IEC 60950-1 or IEC 62368-1			
Temperature Range			
Operating Temperature Range	0° to +45° C / 32° to 113° F		
Storage Temperature Range	-10° to +70° C / 14° to 158° F		
Environmental Specifications			
Indoor use only			
 Altitude: -400 m to 2000 m 			
• Relative Humidity: 0 – 90%			

Main supply voltage fluctuation up to 5%Overvoltage category: OVCII

Pollution degree: PD2

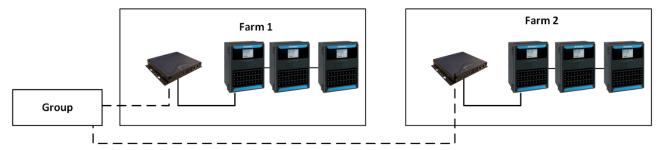
• Ingress Protection: IP50

5 Group Management

When using the CommBox to connect to your farm(s), you must:

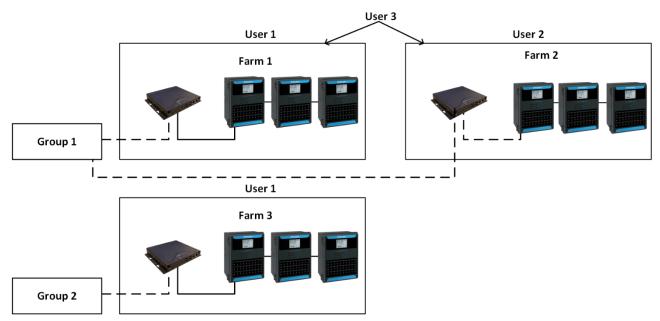
- create a group
- define user rights

NOTE A group is the virtual device used to manage your farms. Using the MuntersNet Web application, the group manager defines each user's permissions (which farms he can see and what functions he can carry out).



As an example, an account manager has sent up two Groups and wants to add three different users to his account.

- 1. User 1 is assigned access rights to Farm 1.
- 2. User 2 is assigned access rights to Farm 2.
- 3. User 3 is assigned access rights to Farm 1 and Farm 2.
- 4. In addition, User 1 is also assigned access rights to Farm 3, which is in an entirely different group.



Any combination is possible.

- Activating the Group
- Log In

- Attaching the Farm to a Group
- Local Log In

5.1 Activating the Group

The first time that you power up a CommBox, you need to activate a group.

1. Connect the CommBox to a screen, keyboard, and mouse. Apply power. The Farm Activation screen appears.



- 2. Fill in the fields:
 - O Name: Type in the farm name.
 - o Farm Type: Choose the type from the drop-down list.
 - Baudrate/Com Port: CommBox has default settings of 9600 BPS/COM Port
 1, respectively. If you need to change these setting, click on the pencil and choose a setting from the drop-down list.

NOTE Verify that the CommBox and controller baud rates are the same.

• Number of Houses: Select the number from the drop-down list.

NOTE You can edit all of these settings in MuntersNet Web.

- 3. Click Activate. A pop up appears asking if you want to scan your farm houses.
 - Click Start Scan if the CommBox is connected to the controllers
 - Click Cancel if the CommBox isn't connected
- 4. A second pop-up appears, asking if you want to connect to the Web.
 - Click on the Connect to Web to connect your CommBox to the web. This enables remote monitoring and control.
 - If you want, you can be reminded to scan at a later time. (Alternatively, click Don't Remind Me Later).

NOTE If you decide not to connect now, you can always connect by clicking on the MuntersNet Web Tab Farm Setting.

As the Group administrator, you can invite other people to join the group as well as define their access rights. This is done in MuntersNet Web itself.

5.2 Log In

1. If you have a MuntersNet Web user name, log in.



Figure 20: Login Screen

2. If you are a new user, click Sign up now. The following screen appears.



Figure 21: Create a New User Screen

- 3. Fill in all fields.
- 4. Click Create a User. The following screen appears.



Figure 22: Sign In Screen (Example)

NOTE To disconnect from the web, click the <u>Disconnect</u> button (refer to page 29).

5.3 Attaching the Farm to a Group

After signing in one of the following screens appears:

5.3.1 No Existing Groups

1. If there are no existing groups for this farm, the following screen appears:



Figure 23: No Existing Group Screen

2. Write the name of the farm group that you want to create and click **Attach to Group**.

5.3.2 GROUPS EXIST

If the farm is part of a group or if the owner has created groups do one of the following:

• Check the radio box next to the group to which you want to attach your farm and click **Attach to Group**.



Figure 24: Attach Farm to Group Screen

• To add an additional group, type in the Group Name and click Add a Group.



Figure 25: Add a Group Screen

5.4 Local Log In

In the event that:

- You restart your system
- CommBox logs off (this can happen automatically if you are not using system)
- Power goes off

you need to log on to the CommBox locally. The username and password of this login are different from the ones used when logging on to the Web.

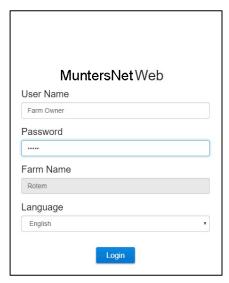


Figure 26: Farm Settings

- Enter the user name and password. The defaults are:
 - User name: "Farm Owner"
 - Password: "admin"

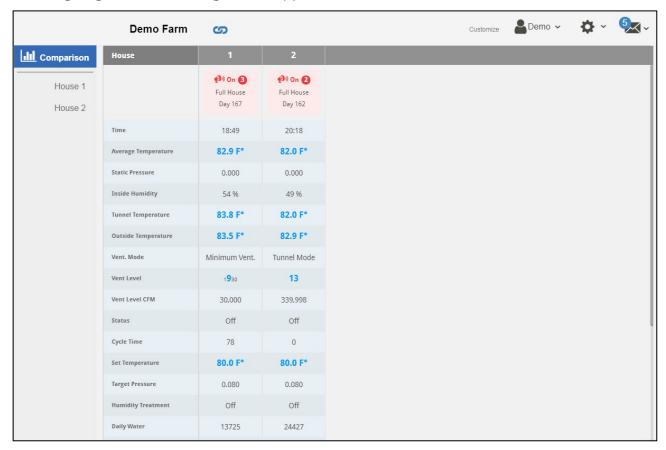
NOTE The user name cannot be changed. You can change the password after logging in. NOTE After logging in locally, you will need to log in to the Web (Log In, page 24).

6 MuntersNet Web

The following sections describe how to use the MuntersNet Web functions. All other functions are described in the Platinum Touch manual.

- MuntersNet Web Functionality
- User Settings
- Software Upgrade

After signing in, the following screen appears:



- Click on House to go to the Platinum Touch functions.
- Click on to configure MuntersNet Web functionality.
- Click on Farm Owner to configure the user definitions.

6.1 MuntersNet Web Functionality

The following section describes the MuntersNet Web functions.



- Farm Settings Tab
- House Scan Tab
- Diagnostics Tab
- About Tab

NOTE Only the farm owner can view the Farm Settings and House Scan tabs.

6.1.1 FARM SETTINGS TAB

- Farm Settings
- Push Notifications
- Local Users
- Data Collect
- Activity Log

NOTE The "Push Notifications" and "Local Users" tabs appear only on the computer screen connected directly to the CommBox.

6.1.1.1 Farm Settings

Use this screen to define functions related to CommBox's connection to your farm.



- Farm Name: This is the name that appears on your screen.
- Connect/Disconnect: This function enables disconnect from the current farm from the internet and reconnecting it via the Log-in screen (refer to Log In, page 24).

NOTE This function only appears on screens locally connected to the CommBox.

- Farm Type: Poultry or Pigs. Make sure that the definition matches the CommBox type!
- Baud rate: This rate must be the same throughout the network.
- Com Port
- Contact information (optional): This information will be used by Munters to contact users if there is a need; for example to inform you of an update. The information will not be distributed to any outside parties whatsoever.
- Number of Houses to be Scanned: Scanning tests communication to the houses. If you wish to scan all houses or individual houses, click the relevant house number. Click Rescan farm houses to complete the scan.
 - You can name the houses.
 - o In units having the CommBox Pig Software, you can name individual rooms.
- Click Save Changes.
- System Update: Refer to Software Upgrade.

6.1.1.2 Push Notifications

CommBox can send push notifications to multiple email addresses. These emails list any current alarms.

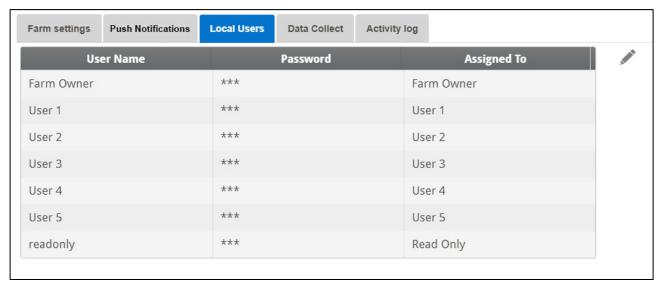


• Enter an address, click Check, Add, and then Save.

WARNING! The CommBox Push Notification system does not provide detailed alarm information. The system is indicative only. To receive real-time alarms along with the ability to configure and manage alarms, contact your dealer about an independent alarms system (for example the Communicator).

6.1.1.3 Local Users

NOTE This tab and screen only appear when connected directly to the CommBox (meaning not via the web).



This screen lists pre-assigned user names and passwords.

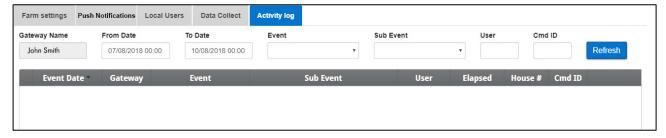
- Each user name and password is the same. For example, User 1's password is User 1. User 2's password is User 2.
- The Farm Owner can edit these names, passwords, and to whom they are assigned.

6.1.1.4 Data Collect

Refer to Appendix B: Data Collection, page 44.

6.1.1.5 Activity Log

This screen displays the history of events connected to the CommBox. Under Event, Sub Event, User, and Cmd ID you can select filters to narrow down the results.



Refer to Appendix A: Generating an Activity Log, page 38 for detailed information on this function.

6.1.1.6 General Settings

Refer to Appendix B: Data Collection, page 44.

6.1.2 HOUSE SCAN TAB

The House Scan screen:

- Shows the results of the house scan.
- Show the controller type and version used in each house.

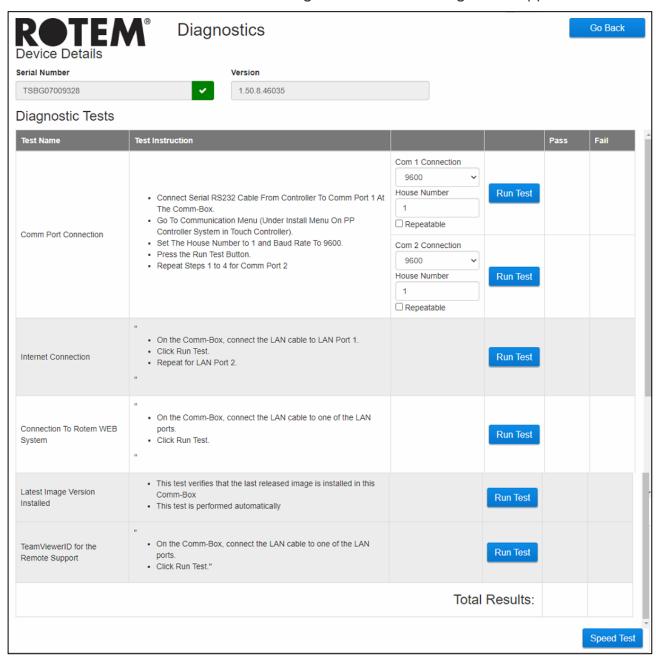


6.1.3 DIAGNOSTICS TAB

CommBox 4.6.0.35 includes a basic diagnostics package.

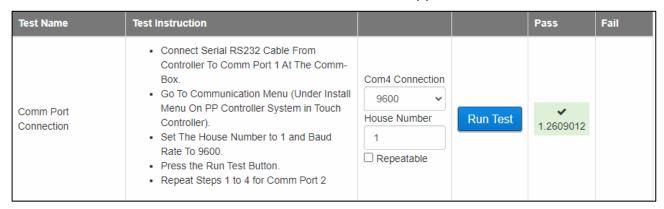


• On the Activation screen click Diagnostics. The following screen appears.

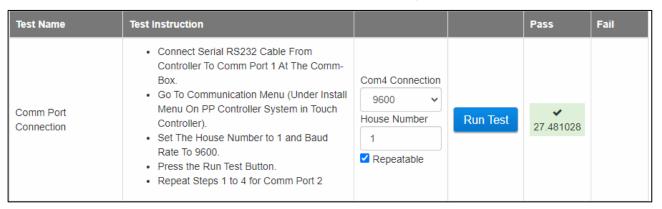


CAUTION When switching from Diagnostics mode to Normal mode, there could be a System Issue with closing communication port. If there is a service interruption, reboot the CommBox.

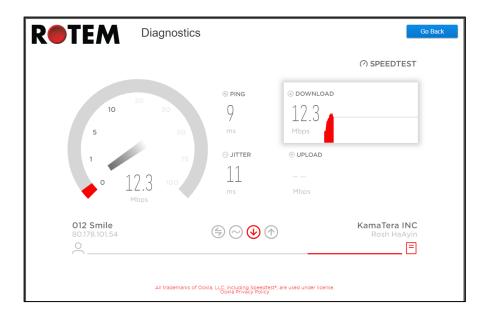
- Use this screen and the information it supplies when speaking with technical support.
- Diagnostic Tests enables the following tests:
 - Lan test
 - Internet tests
 - Support tests
 - COM Port test. This option can be used to test the communication between the CommBox and any house. Enter the number of the house to be tested. This test has two options:
 - Standard. This test shows the ping time between the CommBox and the selected controller. Either a number appears or there is a failure.



Repeatable. This test enables verifying that the controller's communication card (RS232 or RS485) is sending and receiving signals. Click the Run Test icon and examine the controller communication card to ensure that its test LEDs are flashing.

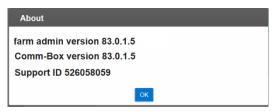


o Enables a speed test.



6.1.4 ABOUT TAB

This screen displays the product and software version. Send this information to technical support in the even that you require assistance. The Support ID enables remote technical support from Munters or from your dealer.

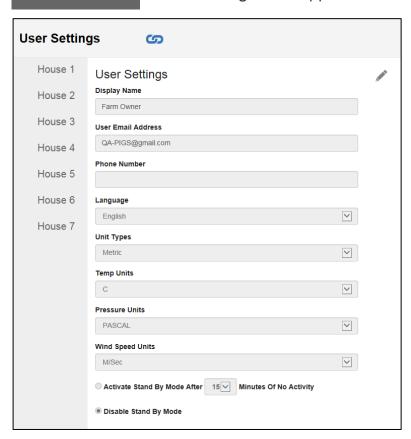


6.2 User Settings

This screen defines how information appears on the screen. In Farm Owner, select

User Settings

. The following screen appears.



- To edit, click . Fill in the following fields as required.
 - o Display name: Name that appears on the User Setting screen.
 - User email address
 - o Phone number
 - Language: Chose from the drop-down list
 - o Unit types: Metric or English
 - o Temp Units: Celsius or Fahrenheit
 - Pressure Units
 - Wind Speed Units
 - Disable or enable standby by mode (if the latter, define the amount of time that needs to pass before the mode is activated).
- Click to save any changes.

6.3 Software Upgrade

You can upgrade certain software programs from the Web application.

- Platinum Touch software
- Web application
- CommBox software

NOTE The CommBox can only be updated locally; it cannot be updated remotely. The System Update button does not appear in remote connections.

NOTE You cannot upgrade product software! Upgrade your product software using the procedures given in the product manuals.

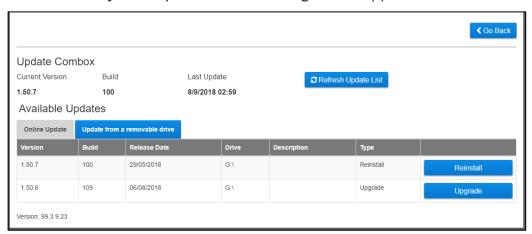
NOTE If you are using a disk on key start here. If you are updating your CommBox via the web, go to step 4.

- 1. Request the software upgrade from your dealer. You will be sent (via email, web transfer, etc.) a UPD file.
 - a. Place the file on a disk on key/flash drive.
 - b. Place the disk on key/flash drive into the CommBox' USB port.
- 2. In the web application, click the Farm Settings tab. The following screen appears.



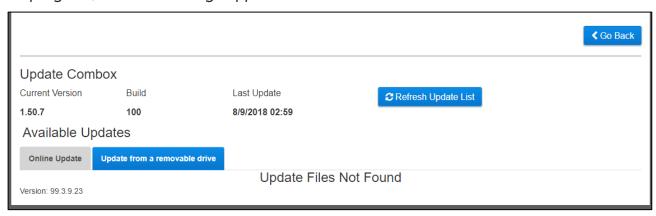
Figure 27: Farm Settings

3. Click System Update. The following screen appears:



- Users updating online: Click **Online Update** and choose the required software version.
- User updating using a flash drive: Click **Update from a removable drive** and choose the required software version.

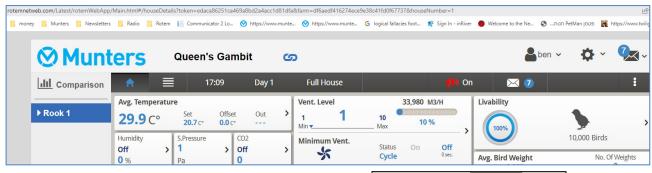
NOTE If you did not place the disk on key in the USB port or if the disk does not contain a program, an error message appears.



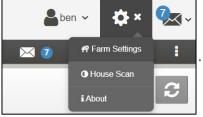
7 Appendix A: Generating an Activity Log

The following section details how to use the Activity Log, in particular how to determine who made changes to the controllers' settings. Please note:

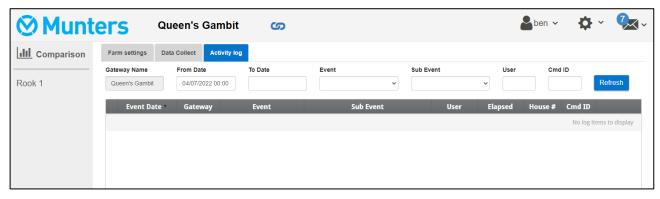
- These inquiries can only be made via the web. Local connections or connecting via TeamViewer do not support this function.
- Only changes made via the web are listed! Changes made locally by the farm owner or administrator are not listed.
- Only administrators can perform this function.
- 1. Connect to a farm via www.rotemnetweb.com.



2. Under the settings icon, click Farm Settings.



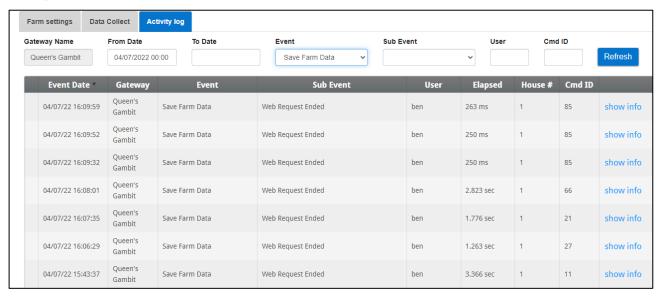
3. Click the Activity Log tab.



- 4. Define as needed:
- Gateway Name: (farm name that the user chose): Read only.
- From/To: Define the time frame.
- Event:

- o To see all events, leave this field empty.
- To see who made changes to the controller settings, choose Save Farm Data from the dropdown list.
- Sub Event: Select if required.
- User: If you are looking for a specific person's activities, type in the user name.
- Cmd ID: If you are looking for a specific change in controller settings, type in the command ID. See the list in the following table.

In the following example Event is defined as **Save Farm Data**. User **ben** made the following changes:



o 85: History feed

o 66: Fan air capacity

o 21: Event DB Property

o 27: Temp & Timer Setting

o 11: VOID (Reserved)

CMD IDs and Description		
1: Version Old	3: VOID	4: Signature
7: Active Alarm	9: VOID	11: VOID
12: Bird Inventory - READ	13: VOID	14: VOID
15: VOID	17: CO2 Treatment STD	18: VOID
19: Dosing Pump	20: PCI	21: Event DB Property
23: VOID	24: Ammonia Treatment STD	25: Relay Current
27: Temp & Timer Setting	28: STD	29: VOID
30: Stir Fan Level	31: VOID	32: VOID

CMD IDs and Description			
33: VOID	34: VOID	35: VOID	
36: VOID	37: VOID	38: Light Feed	
39: Water and Feed	40: Extra System	41: Static Pressure Standard	
42: Static Pressure Precision	43: Control Mode	44: Bird Curve	
45: History Setup	46: Levels Of Ventilation	47: Feed Calibration	
48: Water Calibration	49: Setup	50: Relays Layout	
51: Analog Sensors	52: Digital Sensors	53: Temp Definition	
54: Curtains Setup	55: Vent And Curtain Level	56: Sys CO2 Treatment STD	
57: System Parametes	58: Bird Scale Setting Bre As Bro	59: Alarm Settings	
60: Sys Ammonia Treatment STD 9	61: Stir Fan Program	62: VOID	
63: VOID	64: Analog Output	65: Temperature Reminder	
66: Fan Air Capacity	67: VOID	68: Speed Fan Levels	
69: Feed Bin Settings	70: Data Plug	72: Relays Test	
73: VOID	74: Daily DB Property	75: Cage	
76: EggRoomSetPoint	77: VOID	78: VOID	
81: Sys Nest	83: History Temperature	84: History Humidity	
85: History Feed	87: History Alarams	88: SSC Plug Play	
90: Sys_ControlMode	92: Week Of Flock	93: Time	
94: VOID	96: SRP HUB HW	97: Feed Inventory	
98: Last 100 Weights	99: Set THI	101: Temp Curve	
102: Set Rad Heater	103: Vent Level Set Point	104: Set stir fan	
105: Static Pressure Set Point	106: Set Cool Pad	107: Set Point Foggers	
108: Set Humidity Treatment	109: Set Soft Min/Max Level	110: VentAndCurtainLevels Set Point	

CMD IDs and Description		
111: Light Set parameters	112: Active Silo	113: Emergency Set Point
114: VOID	115: Sys Minimum Vent	116: Set Relay Current
117: Bird Inventory - WRITE	118: VOID	119: Alarm DB Property
120: RDT Table	122: Test Analog Input	123: Test Digital
124: VOID	125: RDT Set Table	126: SSC HD
127: Het Key – Temperature Sensors	128: FeedQuantityUpdate	130: VOID
131: VOID	132: VOID	133: VOID
134: CO2 Set Point	135: Sys Water and Feed	137: VOID
138: VOID	139: VOID	140: VOID
141: History System Events	142: Set Bird Scale Setting BreAsBro	143: WorkRoomControl
144: EggRoom	145: VOID	146: CO2 Treatment
147: Feed Conversion	148: SRP Hub Plug And Play	149: Light No Feed
150: History View DB Property	151: New History View	152: Set Dosing Pump
153: Levels Of Ventilation – Read Only	154: Min/Max Level By Weight	155: Set Point of Min/Max Level By Weight
156: Set Point Scale Laout	157: MinVent & Ramping Set point	158: Fogger Set Point (STD)
159: Fogger STD	160: Variable Speed Fans Setting	162: STD Curtain Set up
163: set.Std_V_Speed_Fans	164: Stir Fan Set program	165: Water On Demand
166: Sys variable heat	194: Feed Scale Program	206: Light No Feed
207: Light Feed	208: Water And Feed	215: Auger Layout
216: Water And Feed By Quantity from 5.05	217: Water And Feed By Quantity	218: Set Curve
222: Set Natural Program	224: Natural Program	225: Ammonia Treatment

CMD IDs and Description		
228: Service Wind Direction	231: Ammonia Treatment SetPoint	235: Feed Line Calibration
236: Set Floor Heat	237: Light Dimmer Comm	238: Water and Feed SetPoint
239: Set Water On Demand	243: Minimum Vent Timer STD	244: Timer Settings STD
247: Temp And Timer Settings STD	248: Sys Humidity TreatmentSTD	249: Sys Curtain Calibration
255: Hot Key Natural	256: Hot Key - Lights	257: Munters Drive
258: Water Meters	260: Web OverView	261: Dash Board
262: Switches Change Confirm	263: Switche Status Array	264: Status Bar
265: Temp Reminder	266: System Security	267: Signatures
270: ReciveOnce	271: EggRoomHistory	272: HK EggRoom
273: HumidityFactorComm	274: WaterAndFeedBreeder	276: History Egg Belt
277: Fast Main Screen	278: Hot Key - Water & Feed	279: History Egg Counter
280: HK Egg Counter	284: History Ammonia	285: Hot Key – Analog Output
286: SetPoint Feed Scale	287: HK Feed Scale	288: Scale Clibration
290: Scale Layout	291: Emergency Set Comm	293: Hot Key - Scales
294: Set Analog Output	295: Feed Scale Program	296: Hot Key Feed Bin
298: Feed Scale Setting	299: HK_FeedScale	300: Hot Key - Temperature & Humidity
301: Hot Key - Curve	302: Water and Feed Set Mem23	303: Hotkey Zoon Inlet
304: Hot Key - Infra Red	305: VOID	306: Nest table
307: Hot Key - Curtains	308: Bird Weight Bre As Bro	309: Scale History Bre
311: Bird Weight Bre Auto	312: Web Weight	313: Control Level By Weight Hot Key

CMD IDs and Description		
314: Scale Test	315: FDQ Tab 1	318: HK Pump Dosing
319: TableWarning	320: Heather Duration	321: Power Consumption
322: History Heaters	323: History Mortality	324: History Water
325: SSC Power Consumption	326: SSC HK	327: FDQ Tab 2
328: History Variable Heaters	329: Hot Key Cool Ramping	330: Dosing Pump
331: Dosing Pump History	332: History Table Of Events	333: History Radiant Heaters
334: Power Meter HK	335: Munters Drive HK	336: Scale History
337: CO2 History	338: SRP Hub	

8 Appendix B: Data Collection

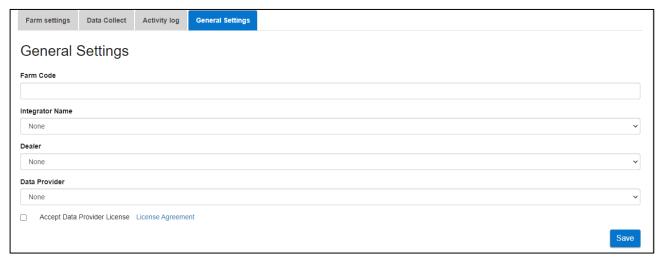
8.1 Centralized Collection

NOTE Only use the Centralized Collection function after consulting with Munters technical support.

- Only the group owner or administrator can define the General Settings. The following tab does appear on any other user's screen.
- The General Settings page is an option. If data upload is to a local server only, leave these fields blank and go to Defining the FTP/SFTP server.
- 1. In the settings icon, select Farm Settings.

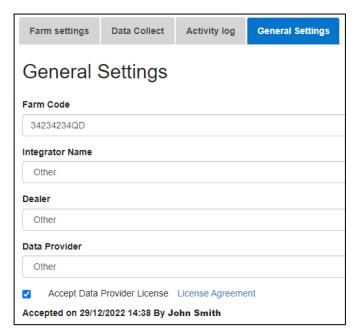


2. Go to Farm Settings > General Settings.



- 3. Enter the data as follows:
 - Farm Code: This is a code provided by the integrator used to identify the farm.
 - Integrator Name: From the drop-down list, select the required name.
 - o Dealer: From the drop-down list, select the required dealer name.
 - o Data Provider: From the drop-down list, select the required data provider.
 - Accept Data Provider License. Mark this box. This box must be checked to enable centralized data collection.

NOTE This acceptance is saved.



4. Click the Data Collect Screen. Refer to the following section.

8.2 Defining the FTP/SFTP server

Use this function to enable data collection to your FTP/SFTP site.

NOTE Data Upload Allowed appears if the General Settings fields are filled out and Data Provider License accepted. If the fields are filled out but the license is NOT accepted data, upload is disabled.



- Data Upload Settings:
 - o Check Allow to change settings to enable editing the page.
 - Select FTP or SFTP and check the box.
 - License key: This is a read-only field. The field is filled in automatically if you fill in the General Settings fields.
- FTP/SFTP Details: Fill in the fields as required.
- Collect Preferences:
 - Under Select Houses, select at least one house to enable changing Auto Collect settings.
 - o Check Alarm History, VFT, and Collect Alarms every 1 minute as required.

CAUTION Only mark the Alarm History, VFT, and Collect Alarms checkboxes if you are uploading data to a centralized collector. Anyone using a private FTP server must leave these boxes unchecked!

- Select the output file format.
- o Define the collection interval.

9 Warranty

Warranty and technical assistance

Munters products are designed and built to provide reliable and satisfactory performance but cannot be guaranteed free of faults; although they are reliable products they can develop unforeseenable defects and the user must take this into account and arrange adequate emergency or alarm systems if failure to operate could cause damage to the articles for which the Munters plant was required: if this is not done, the user is fully responsible for the damage which they could suffer.

Munters extends this limited warranty to the first purchaser and guarantees its products to be free from defects originating in manufacture or materials for one year from the date of delivery, provided that suitable transport, storage, installation and maintenance terms are complied with. The warranty does not apply if the products have been repaired without express authorisation from Munters, or repaired in such a way that, in Munters' judgement, their performance and reliability have been impaired, or incorrectly installed, or subjected to improper use. The user accepts total responsibility for incorrect use of the products.

The warranty on products from outside suppliers fitted to CommBox, (for example power supplies, cables, etc.) is limited to the conditions stated by the supplier: all claims must be made in writing within eight days of the discovery of the defect and within 12 months of the delivery of the defective product. Munters has thirty days from the date of receipt in which to take action, and has the right to examine the product at the customer's premises or at its own plant (carriage cost to be borne by the customer).

Munters at its sole discretion has the option of replacing or repairing, free of charge, products which it considers defective, and will arrange for their despatch back to the customer carriage paid. In the case of faulty parts of small commercial value which are widely available (such as bolts, etc.) for urgent despatch, where the cost of carriage would exceed the value of the parts, Munters may authorise the customer exclusively to purchase the replacement parts locally; Munters will reimburse the value of the product at its cost price.

Munters will not be liable for costs incurred in demounting the defective part, or the time required to travel to site and the associated travel costs. No agent, employee or dealer is authorised to give any further guarantees or to accept any other liability on Munters' behalf in connection with other Munters products, except in writing with the signature of one of the Company's Managers.

WARNING: In the interests of improving the quality of its products and services, Munters reserves the right at any time and without prior notice to alter the specifications in this manual.

The liability of the manufacturer Munters ceases in the event of:

- dismantling the safety devices;
- use of unauthorised materials;
- inadequate maintenance;
- use of non-original spare parts and accessories.

Barring specific contractual terms, the following are directly at the user's expense:

- preparing installation sites;
- providing an electricity supply (including the protective equipotential bonding (PE) conductor, in accordance with CEI EN 60204-1, paragraph 8.2), for correctly connecting the equipment to the mains electricity supply;
- providing ancillary services appropriate to the requirements of the plant on the basis of the information supplied with regard to installation;
- tools and consumables required for fitting and installation;
- lubricants necessary for commissioning and maintenance.

It is mandatory to purchase and use only original spare parts or those recommended by the manufacturer.

Dismantling and assembly must be performed by qualified technicians and according to the manufacturer's instructions.

The use of non-original spare parts or incorrect assembly exonerates the manufacturer from all liability.

Requests for technical assistance and spare parts can be made directly to the nearest Munters office.

