AirLink 7530 Relayer

Operator's Manual

Part Number: 71-0553

Revision: P4

Released: 1/17/24

RKI Instruments, Inc.
www.rkiinstruments.com

Product Warranty

RKI Instruments, Inc. warrants gas alarm equipment sold by us to be free from defects in materials, workmanship, and performance for a period of one year from date of shipment from RKI Instruments, Inc. Any parts found defective within that period will be repaired or replaced, at our option, free of charge. This warranty does not apply to those items which by their nature are subject to deterioration or consumption in normal service, and which must be cleaned, repaired, or replaced on a routine basis. Examples of such items are:

- Absorbent cartridges
- Fuses
- Pump diaphragms and valves
- Batteries
- Filter elements

Warranty is voided by abuse including mechanical damage, alteration, rough handling, or repair procedures not in accordance with the operator's manual. This warranty indicates the full extent of our liability, and we are not responsible for removal or replacement costs, local repair costs, transportation costs, or contingent expenses incurred without our prior approval.

> THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY AND ALL OTHER WARRANTIES AND REPRESENTATIONS, EXPRESSED OR IMPLIED, AND ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF RKI INSTRUMENTS, INC. INCLUDING BUT NOT LIMITED TO, THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL RKI INSTRUMENTS, INC. BE LIABLE FOR INDIRECT, INCIDENTAL, OR CONSEQUENTIAL LOSS OR DAMAGE OF ANY KIND CONNECTED WITH THE USE OF ITS PRODUCTS OR FAILURE OF ITS PRODUCTS TO FUNCTION OR OPERATE PROPERLY.

This warranty covers instruments and parts sold to users by authorized distributors, dealers, and representatives as appointed by RKI Instruments, Inc.

We do not assume indemnification for any accident or damage caused by the operation of this gas monitor, and our warranty is limited to the replacement of parts or our complete goods.

Table of Contents

Overview

The AirLink 7530 is a 32-channel 3-relay wireless relay/alarm system specifically designed for use in conjunction with other AirLink products.

The AirLink 7530 is available in an explosion-proof construction and in a non-explosion-proof construction.

The AirLink 7530 can monitor up to 32 sensors. The ability to mount the device near the entrance of a site allows the technician to immediately determine if it is safe to enter the site, making this device incredibly useful in any environment hosting hazardous gas. The AirLink 7530 can be mounted as a traditional or self-contained system that requires 12-24 Volts DC or 120/240 Volts AC. The AirLink 7530 receives transmissions from AirLink detector heads via an on-board 900 MHz or 2.4 GHz radio.

This document should be read before initial operation of the product.

About this Manual

The *AirLink 7530 Gas Monitor Operator's Manual* uses the following conventions for notes, cautions, and warnings:

NOTE: Describes additional or critical information.

CAUTION: *Describes potential damage to equipment.*

WARNING: Describes potential danger that can result in injury or death.

Caution: Refers to accompanying documentation

~ Vac (AC voltage)

⎓ Vdc (DC voltage)

Specifications

Input Power	• 110/240 VAC **OR** • 12 - 35 VDC
Current Draw	3A max while powering devices connected to relays
Operating Temperature	-22°F to 158°F (-30°C to 70°C)
Input Signal	Up to 32 WireFree sensor assemblies
Output	RS-485 Modbus
Construction, Explosion-Proof Version Only	Explosion-proof housing
Hazardous Location Rating, Explosion-Proof Version Only	Class I, Division 1
Dimensions	Non-Explosion Proof Version 19.0 in. H x 11.1 in. W x 4.6 in. D (48.3 cm H x 28.2 cm W x 11.7 cm D) Explosion-Proof Version 17.5 in. H x 9.3 in. W x 6.25 in. D (44.5 cm H x 23.6 cm W x 15.9 cm D)
Weight	Non-Explosion Proof Version 5.2 lbs. Explosion-Proof Version 12.8 lbs.
User Controls	Program buttons: MENU, ADD, SUB
Relays	• 3 relays with 4A fuses • SPDT, Form C (common, normally open, and normally closed contacts)
Radio Options	• 2.4 GHz, ISM, 125 mW **OR** • 900 MHz, 200 mW
Standard Accessory	Operator's manual (this document)
Optional Accessories, Non-Explosion-Proof Version Only	• Strobe • Horn

Component Location

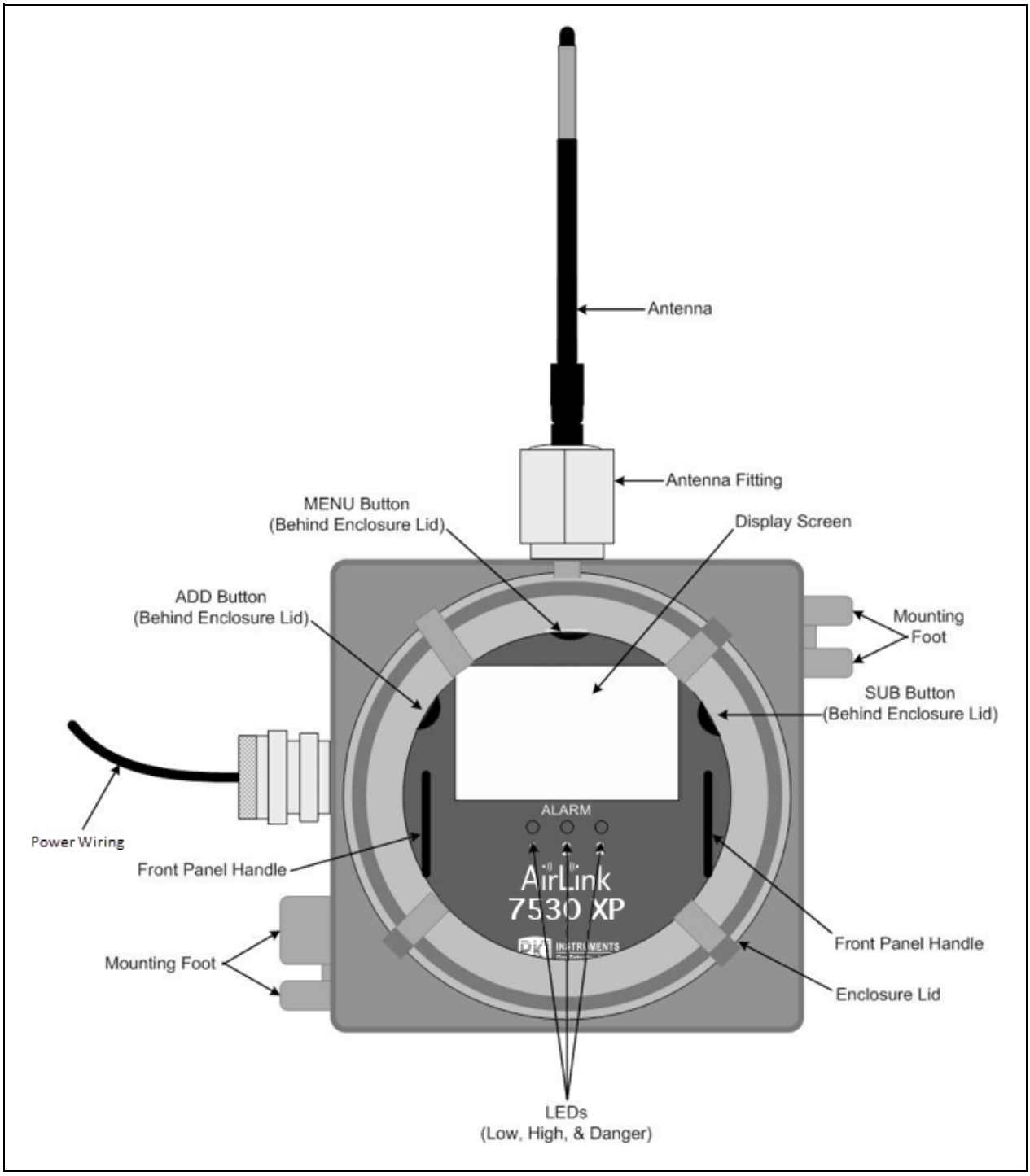

Figure 1: Component Location

NOTE: The component location shown above is for an explosion proof version. The non-explosion proof version has a different housing and does not have handles on the control board.

Control Board

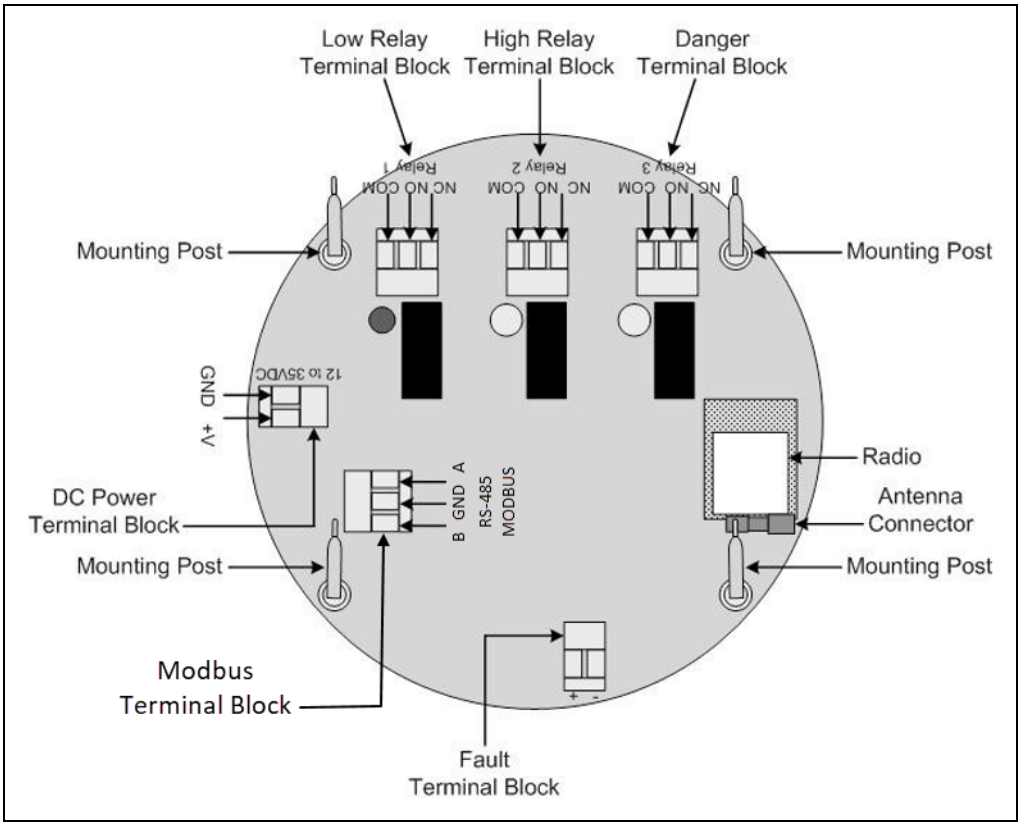

Figure 2: Control Board

Installation

Mounting the AirLink 7530

1. Select the mounting site. When you select the mounting site, consider the following factors:
   - Is an AC or DC power source available?
   - Is a vertical surface available to mount the AirLink 7530?
   - Is there enough room to remove the enclosure lid (XP version)/open the housing door (NXP version) and make wiring connections?
   - Are the display screen and status lights visible?
2. Install the enclosure lid (XP version) or close and latch the housing door (NXP version).
3. Prepare the selected mounting site as required to mount the AirLink 7530. It should be mounted at eye level (4 1/2 to 5 feet from the floor). Refer to Figure 3 for the outline and mounting dimensions.

4. Position the monitor on the vertical mounting surface.
5. Insert bolts or screws through the slots in the mounting feet to secure the device to the mounting surface.

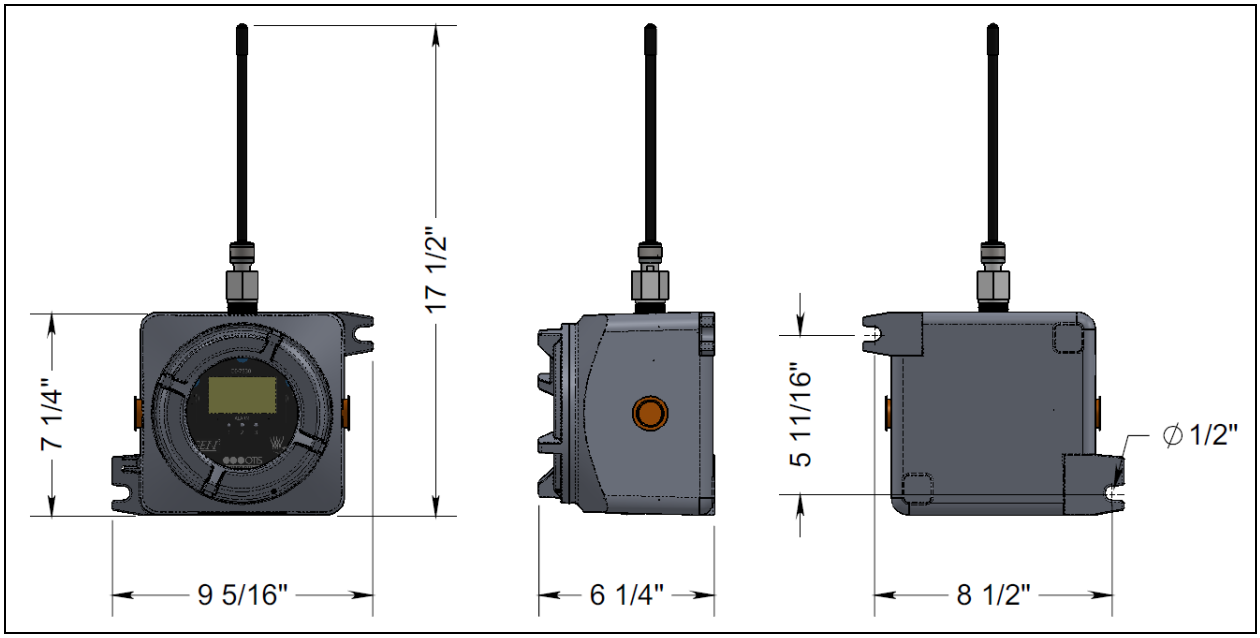

Figure 3: Outline and Mounting Dimensions, XP Version

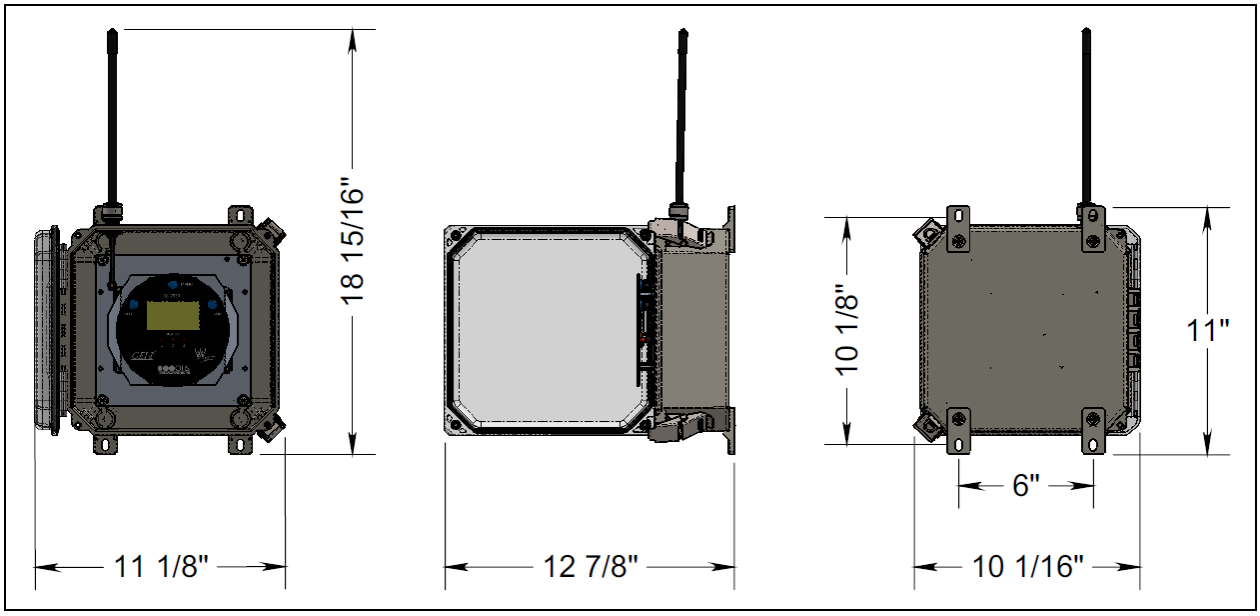

Figure 4: Outline and Mounting Dimensions, NXP Version

AC Wiring

CAUTION: *The internal components can be static sensitive. Use caution when opening the enclosure and handling internal components.*

WARNING: ***Make all connections to the AirLink 7530 before you plug in or turn on the AC or DC power source. Before you make any wiring adjustments, always verify that all power sources are not live.***

WARNING: ***For the explosion proof version of the AirLink 7530, use appropriate construction technique to maintain the explosion proof classification of the assembly.***

22 AWG minimum is recommended for wiring connections. Use what is appropriate for your voltage and current requirements.

The DC terminals are factory wired to the power supply and to the control board. The AC terminals are factory wired to the power supply.

1. AC powered, NXP versions of the AirLink 7530 come with an AC cord installed. Complete relay wiring as described in Step 6 before plugging in the AC power cord.
2. For AC powered, XP versions of the AirLink 7530, follow all of the instructions in this section, starting with Step 3.
3. Remove the enclosure lid (XP version) or open the housing door (NXP version).
4. Pull the control board away from the enclosure to expose the AC and DC terminal strips.
5. Route power wiring through the bushing on the left side of the housing (XP version)/bottom of the housing (NXP version). Connect line (AC load in), neutral (AC neutral in), and ground (chassis ground or earth ground) wires to the right side of the AC terminal strip. You do not need to bring wiring all the way down to the power supply.

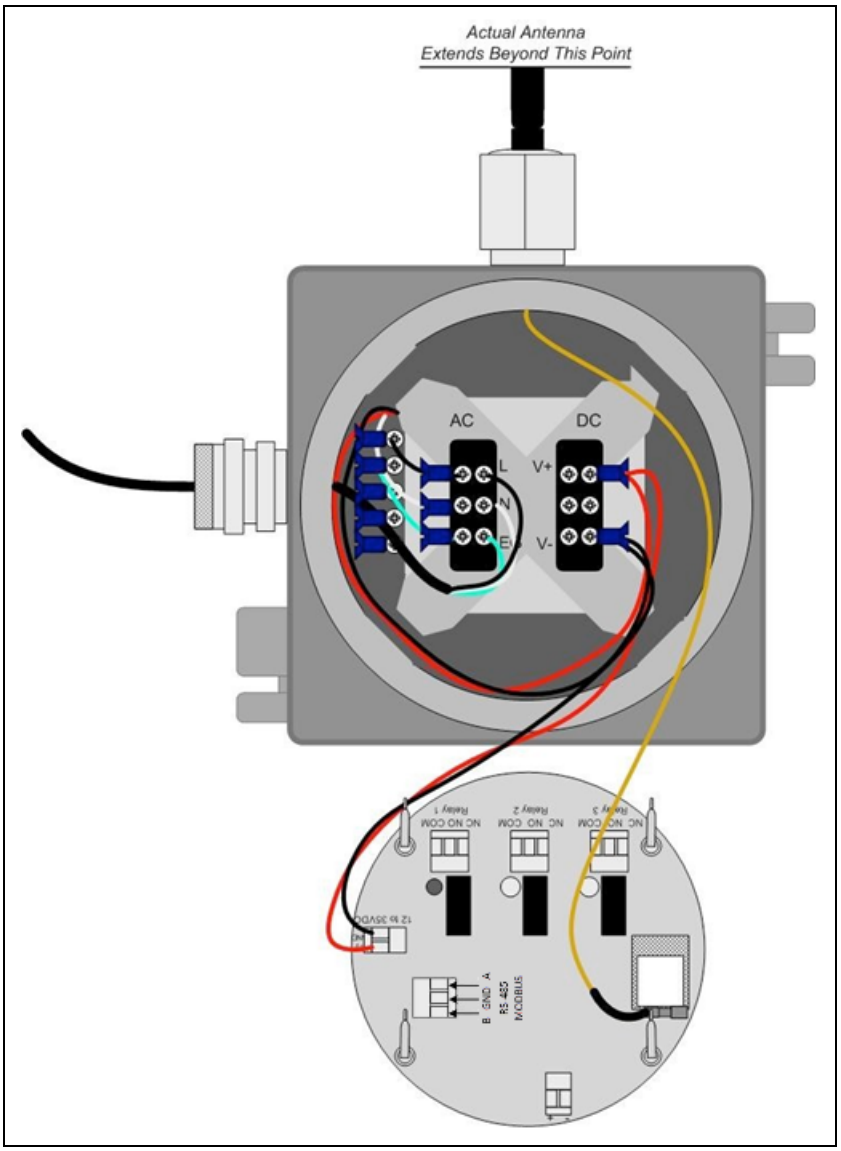

Figure 5: AC Wiring

6. For each relay you want to use, bring cable through the conduit hub on the right side of the housing (XP version) or through a drilled hole (NXP version) using a cable gland or conduit fitting that is appropriate for your installation.

WARNING: For the explosion proof version of the AirLink 7530, use appropriate construction technique to maintain the explosion proof classification of the assembly.

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   a. Connect the relay's COM terminal to the "V+" terminal on the 12 to 35 VDC terminal strip. If you will be using more than one relay, the COM terminals can be jumpered together.

b. Connect the positive wire from the alarm device to the NO or NC terminal on the desired relay terminal strip.

c. Connect the negative wire from the alarm device to the “V-” terminal on the DC terminal strip.

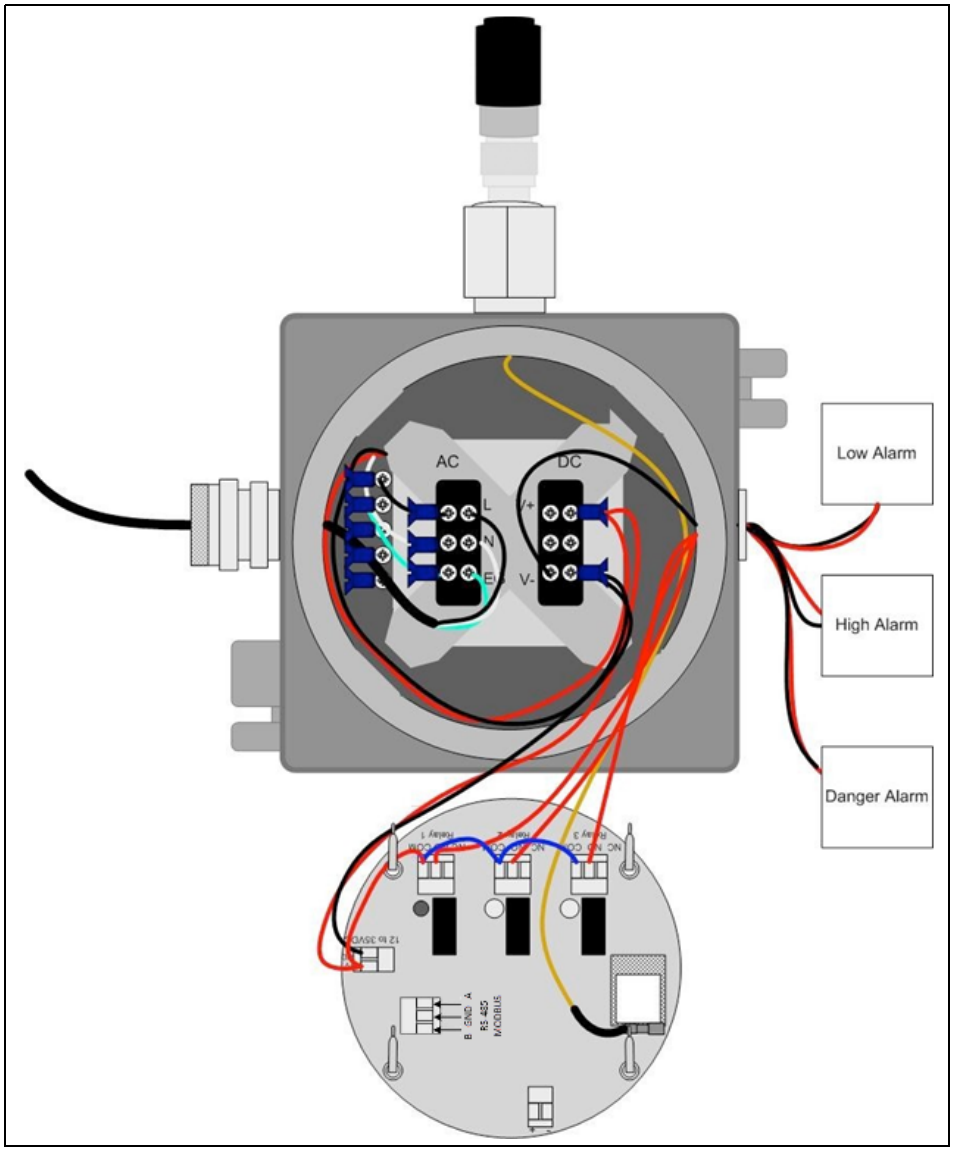

Figure 6: Relay Wiring for AC Version

7. Reinstall the control board, matching each mounting post to its corresponding eyelet anchored within the base of the enclosure, being careful not to disturb the wiring connections.

8. Reinstall the enclosure lid (XP version) or close the housing door (NXP version).

DC Wiring

CAUTION: *The internal components can be static sensitive. Use caution when opening the enclosure and handling internal components.*

WARNING: ***Make all connections to the AirLink 7530 before you plug in or turn on the AC or DC power source. Before you make any wiring adjustments, always verify that all power sources are not live.***

WARNING: ***For the explosion proof version of the AirLink 7530, use appropriate construction technique to maintain the explosion proof classification of the assembly.***

22 AWG minimum is recommended for wiring connections. Use what is appropriate for your voltage and current requirements.

The DC terminals are factory wired to the control board.

1. Remove the enclosure lid (XP version) or open the housing door (NXP version).
2. Pull the control board away from the enclosure to expose the AC and DC terminal strips.
3. Route power wiring through the bushing on the left side of the housing (XP version)/bottom of the housing (NXP version).
   a. Connect a positive wire from the DC power source to the “V+” terminal on the DC terminal strip.
   b. Connect a neutral wire from the DC power source to the “V-” terminal on the DC terminal strip.

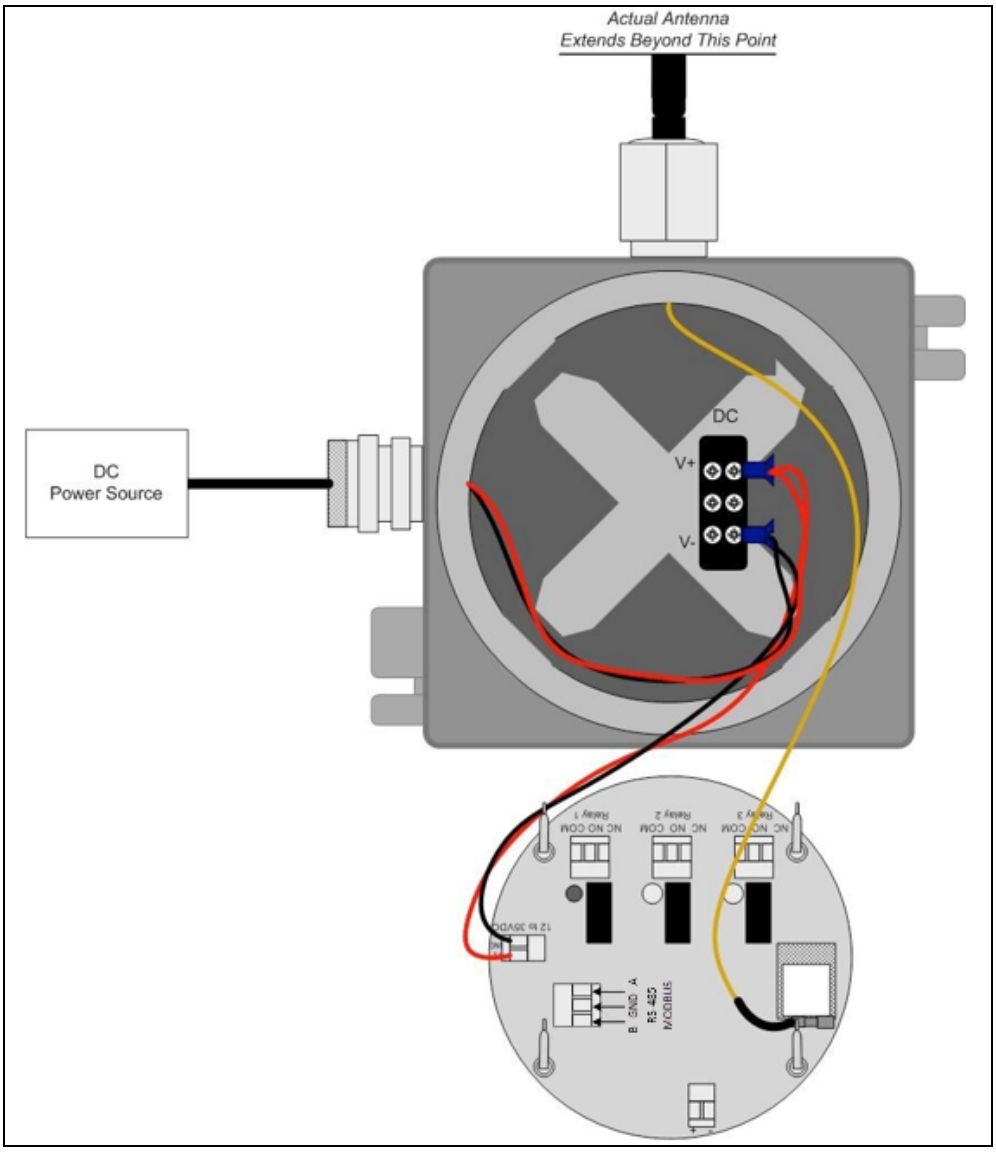

Figure 7: DC Wiring

4. For each relay you want to use, bring cable through the conduit hub on the right side of the housing (XP version) or through a drilled hole (NXP version) using a cable gland or conduit fitting that is appropriate for your installation.

WARNING: For the explosion proof version of the AirLink 7530, use appropriate construction technique to maintain the explosion proof classification of the assembly.

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   a. Connect the relay's COM terminal to the "V+" terminal on the 12 to 35 VDC terminal strip. If you will be using more than one relay, the COM terminals can be jumpered together.

   b. Connect the positive wire from the alarm device to the NO or NC terminal on the desired relay terminal strip.

   c. Connect the negative wire from the alarm device to the "V-" terminal on the DC terminal strip.

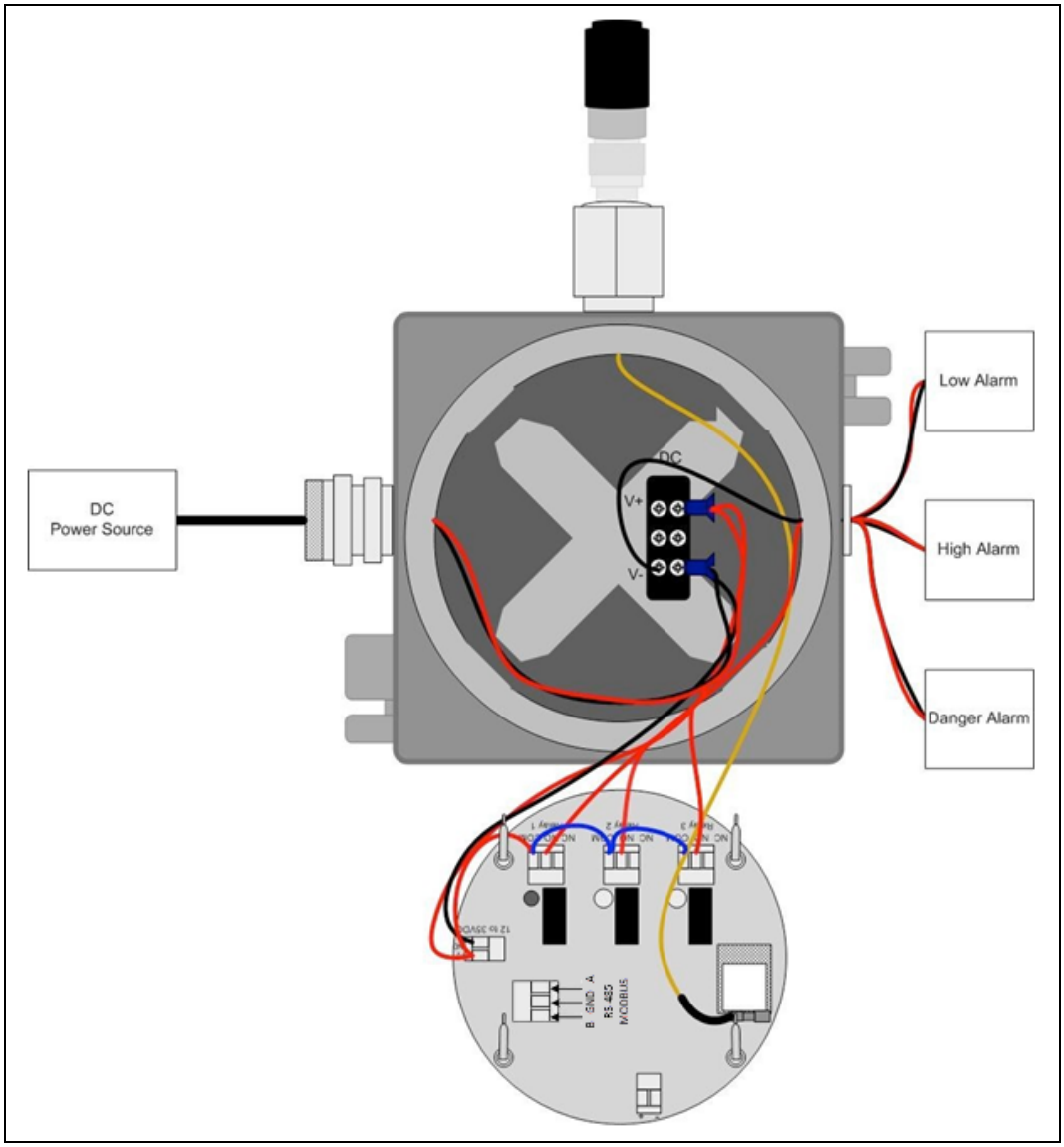

Figure 8: Relay Wiring for the DC Version

5. Reinstall the control board, matching each mounting post to its corresponding eyelet anchored within the base of the enclosure, being careful not to disturb the wiring connections.
6. Reinstall the enclosure lid (XP version) or close the housing door (NXP version).

Modbus Wiring

CAUTION: *The internal components can be static sensitive. Use caution when opening the enclosure and handling internal components.*

WARNING: ***Make all connections to the AirLink 7530 before you plug in or turn on the AC or DC power source. Before you make any wiring adjustments, always verify that all power sources are not live.***

22 AWG minimum is recommended for wiring connections. Use what is appropriate for your voltage and current requirements.

1. Remove the enclosure lid (XP version) or open the housing door (NXP version).
2. Pull the control board away from the enclosure to expose the AC and DC terminal strips.
3. Bring cable through the conduit hub on the right side of the housing (XP version) or through a drilled hole (NXP version) using a cable gland or conduit fitting that is appropriate for your installation.

   WARNING: ***For the explosion proof version of the AirLink 7530, use appropriate construction technique to maintain the explosion proof classification of the assembly.***

   a. Connect the RS-485 B (BROWN) wire to the **B** terminal.
   b. Connect the ground (BLACK) wire to the **GND** terminal.
   c. Connect the RS-485 A (YELLOW) wire to the **A** terminal.
4. Feed the RS-485 cable into the controller and wire them to the correct terminals as shown below.

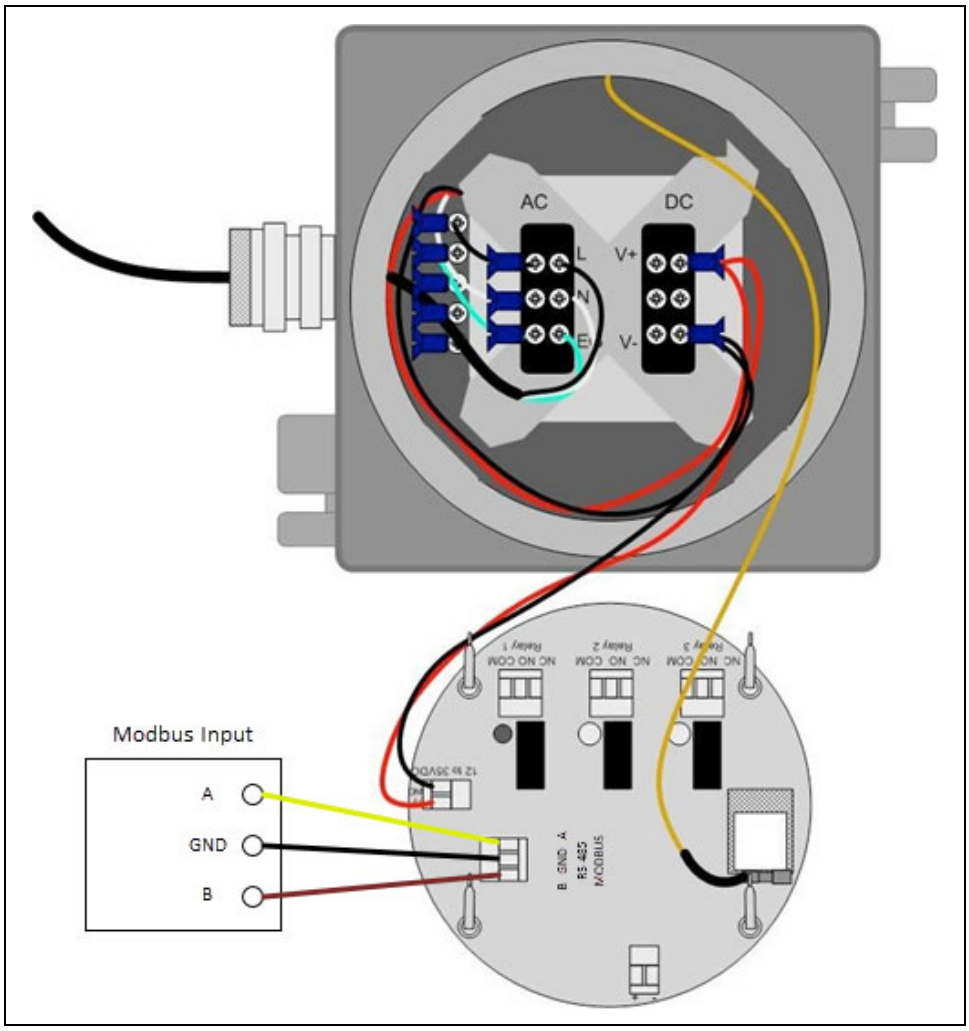

Figure 9: Modbus Wiring

NOTE: If an RKI controller is not used, the AirLink 7530 can be connected to a Programmable Logic Controller (PLC) for RS-485 Modbus data communications. For integration and setup, refer to the Modbus Register Map found on page 33.

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5. Reinstall the control board, matching each mounting post to its corresponding eyelet anchored within the base of the enclosure, being careful not to disturb the wiring connections.
6. Reinstall the enclosure lid (XP version) or close the housing door (NXP version).

Fault Terminal Wiring

CAUTION: *The internal components can be static sensitive. Use caution when opening the enclosure and handling internal components.*

WARNING: Make all connections to the AirLink 7530 before you plug in or turn on the AC or DC power source. Before you make any wiring adjustments, always verify that all power sources are not live.

The fault terminal is used to provide indication of a device failure (for reasons listed on page 29 or for a power failure). The fault terminal is shipped configured as a normally-closed (NC), or fail-safe, configuration, terminating power to the external fault device when prompted. Changing this behavior is detailed on page 27.

Unlike the Alarm 1, Alarm 2, and Danger relay terminals, the fault terminal is a wet-contact, requiring only the power and ground wires of the external fault device to be wired during installation. During normal operation, the fault terminal provides a maximum of 500 mA at the same DC voltage that is powering the device.

1. Remove the enclosure lid (XP version) or open the housing door (NXP version).
2. Pull the control board away from the enclosure to expose the AC and DC terminal strips.
3. Bring cable through the conduit hub on the right side of the housing (XP version) or through a drilled hole (NXP version) using a cable gland or conduit fitting that is appropriate for your installation.

   WARNING: For the explosion proof version of the AirLink 7530, use appropriate construction technique to maintain the explosion proof classification of the assembly.

4. Connect the external fault device power (RED) wire to the + terminal.
5. Connect the external fault device ground (BLACK) wire to the - terminal.

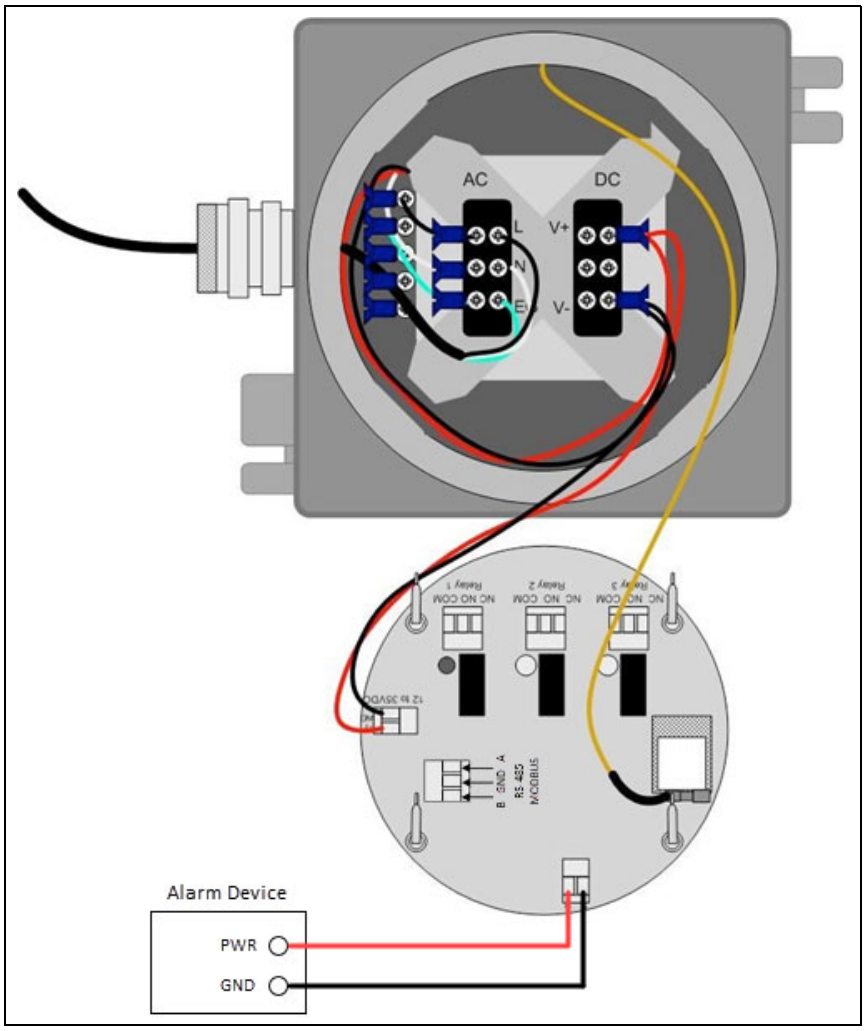


Figure 10: Fault Terminal Wiring

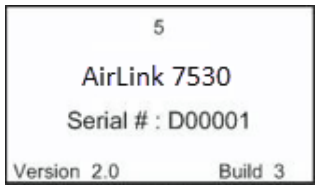
6. Reinstall the control board, matching each mounting post to its corresponding eyelet anchored within the base of the enclosure, being careful not to disturb the wiring connections.
7. Reinstall the enclosure lid (XP version) or close the housing door (NXP version).

Start Up

This section describes procedures to start up the AirLink 7530 and place it into normal operation.

1. Complete the installation procedures described earlier in this manual.
2. Verify that the power wiring is correct and secure.
3. Turn on the power source.

4. The AirLink 7530 automatically powers on and enters a 10-second startup period.



5. At the end of the startup, the AirLink 7530 is in Normal Operating Mode.

Operation

WARNING: ***For the explosion proof version of the AirLink 7530, do not remove the enclosure lid while the circuits are energized unless the area is determined to be non-hazardous. Keep the enclosure lid tightly closed during operation.***

Normal Operating Mode

The AirLink 7530 can monitor up to 32 WireFree sensor assemblies.

When in Normal Operating Mode, configured channels are scanned through, 1 channel at a time, every 3 seconds and the following items are displayed:

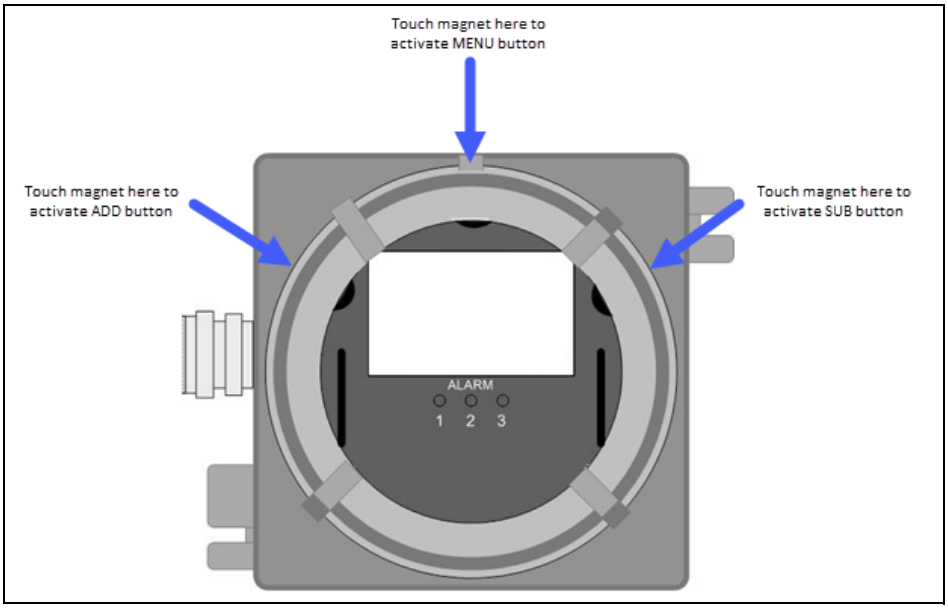
- channel number
- address
- sensor assembly's battery voltage
- gas reading
- signal strength
- primary/secondary monitor status and network ID
- time since last transmission
- fault (if any)

Use *ADD* and *SUB* to scroll to another channel without having to wait for the device to cycle to it.

Magnetic Buttons

NOTE: A magnet is only included with the XP version of the AirLink 7530.

Use the provided magnet to actuate the AirLink 7530's buttons without having to remove the junction box's lid. Touch the magnet to the outer edge of the junction box lid near the button you want to actuate. Tapping the junction box is the same and pressing and releasing the button. Holding the magnet against the junction box is the same as pressing and holding the button.



Power On/Off

When power is first applied to the AirLink 7530, the unit automatically powers on and begins the startup sequence.

The AirLink 7530 will automatically Power Off when voltage is no longer supplied to the unit.

Alarms

If a gas reading activates a relay, the corresponding LED will illuminate and a "1", "2" and/or "3" will appear next to the gas reading for the channel in alarm.

Relay alarms set to latching will not deactivate until the alarms are manually reset at the device. This includes Alarm 1, Alarm 2, and Alarm 3 indicator LEDs and 3 wired relays. When latching alarms have been activated, refer to the following instructions for how to manually deactivate the alarms on your device:

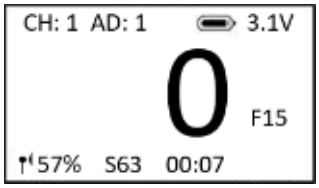
1. Verify that the gas level reading is below the alarm level setting.

2. Press *MENU* to deactivate latching alarm(s).

NOTE: The gas level reading MUST be below the alarm level setting before the alarm can be deactivated. Press *MENU* ONLY once to deactivate the latching alarm(s). Pressing *MENU* more than once will activate and open the Operation Settings menu. The alarms will NOT activate, even in the presence of gas, until you have been out of Setup Mode or Advanced Configuration Mode for 1 minute.

Faults

In the event of a failure, the device will show a fault code for the channel with the failure until the fault has been cleared, or is corrected.



For a list of the fault codes, and their associated meaning, see page 29.

Setup Mode

WARNING: ***For the explosion proof version of the AirLink 7530, do not remove the enclosure lid while the circuits are energized unless the area is determined to be non-hazardous. Keep the enclosure lid tightly closed during operation.***

Overview

This mode is used for: Channel Settings (On/Off, Radio Address), Relay Settings (On/Off, Increasing/Decreasing, Value, Latching/Auto Resetting), viewing System Information, and restarting the system.

NOTE: Each channel must be set up individually.

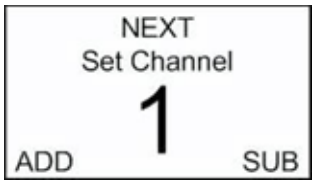
NOTE: The AirLink 7530 automatically saves any changes and returns to Normal Operating Mode 15 minutes after the last button press.

Entering Setup Mode

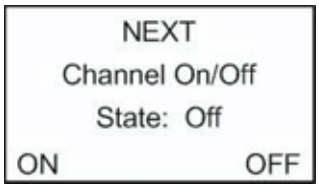
1. From Normal Operating Mode, press and hold *MENU* for 5 seconds.

Channel Settings

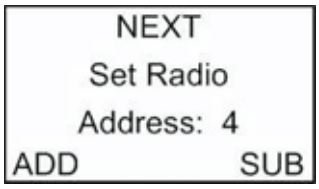
1. Channel Selection: Once in Setup Mode, press *ADD* (increase) or *SUB* (decrease) to select the channel you want to set up (1-32).



2. Press *MENU* (Next).
3. Channel On/Off: Press *ADD* or *SUB* to change the state of the channel to On or Off.



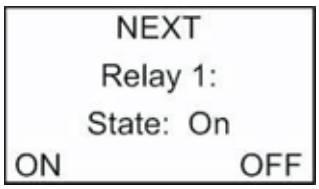
4. Press *MENU* (Next).
5. Radio Address: Press *ADD* (increase) or *SUB* (decrease) to set to radio address (1-255).



6. Press *MENU* (Next).

Relay Settings

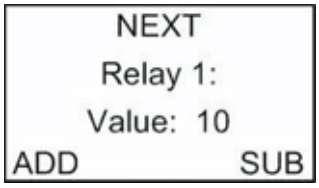
1. Relay On/Off: Press *ADD* or *SUB* to manipulate the relay's On/Off status. The On/Off status affects whether a relay is active on the selected channel or not.



2. Press *MENU* (Next).
3. Relay Increasing/Decreasing: Press *ADD* or *SUB* to manipulate the relay's Increasing/ Decreasing status.

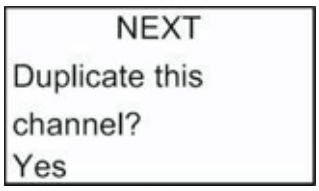
4. Press *MENU* (next).

5. Relay Threshold: Press *ADD* (increase) or *SUB* (decrease) to manipulate the threshold value (1-65,000).



6. Press *MENU* (Next).
7. Relay Latch/Auto Reset: Press *ADD* or *SUB* to manipulate the relay's Latching/Auto Reset status.

8. Press *MENU* (Next).
9. Repeat Step 1 through Step 8 for the remaining relays.
10. Once all three relays have been setup, the display screen will show the following:

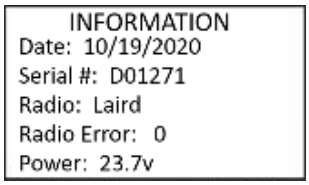


11. Based on the specific application, choose one of the following steps to complete:
    - Press *MENU* (Next) to setup the next channel (or continue to system information)
    - Press *ADD* (Yes) to duplicate the settings to all consecutive channels—and *ADD* (Yes) again to confirm the operation

Viewing System Information

After the last channel is set, press *MENU* to view the system's information, including the:

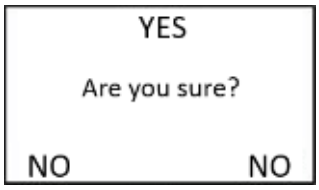
- Build Date (Example: 01/01/2011)
- Serial # (Example: H00001)
- Radio (type)
- Radio error
- Power



Restarting the AirLink 7530

A restart is necessary to access Advanced Configuration Mode. This menu item allows you to restart the system without having to disconnect and reconnect the power source, which may be far away from the device. See page 25 for instructions to enter Advanced Configuration Mode.

1. Press *MENU*.
2. The device will ask you to confirm the restart.



3. Press *MENU* to restart the device.

Exiting Setup Mode

1. From the System Information screen, press *MENU*.

NOTE: The AirLink 7530 automatically saves any changes and returns to Normal Operating Mode 15 minutes after the last button press.

Advanced Configuration Mode

WARNING: ***For the explosion proof version of the AirLink 7530, do not remove the enclosure lid while the circuits are energized unless the area is determined to be non-hazardous. Keep the enclosure lid tightly closed during operation.***

Overview

This mode is used to: adjust LCD contrast, restore factory default settings, set up the fault relay, adjust failsafe settings, set up Modbus parameters, and set up WireFree parameters.

Entering the Advanced Configuration Menu

1. Cycle the unit's power either by disconnecting and reconnecting power or by doing the following.
   a. Press and hold *MENU* for 5 seconds from Normal Operating Mode. The “Set Channel 1” screen appears.

b. Press and release *SUB* until the “Restart AirLink 7530” screen appears.

c. Press *MENU*.

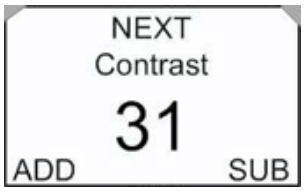
d. Press *MENU* again to confirm the restart.

2. When the RKI Logo appears on the Display Screen, press *MENU*.

NOTE: The AirLink 7530 automatically saves any changes and returns to Normal Operating Mode 15 minutes after the last button press.

Adjusting the LCD Contrast

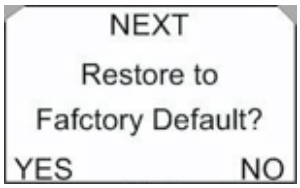
1. Press *ADD* (increase) or *SUB* (decrease) to manipulate the upper screen’s LCD contrast.



2. Press *MENU*.

Restore Factory Default Settings

1. Press *ADD* or *SUB* (Yes/No—as indicated on the display screen) to set the unit back to the factory's default settings. To leave the settings as they are, press *MENU* (Next).

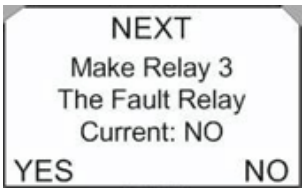


Factory settings are:

- Channels 1-32 set to On
- Relays set to On
- Relays set at “10, 15, and 20”
- All relays set to “Auto Reset” and “Increasing”
- Channel addresses set to 1-32
- Contrast set at 31
- Network ID set to 5
- Secondary Monitor
- Radio timeout set to 10 minutes

Relay Setup

1. Relay 3 as Fault: Press *ADD* or *SUB* (Yes/No—as indicated on the display screen) to setup Relay 3 as the Fault Relay. To leave the setting as it is, press *MENU* (Next).

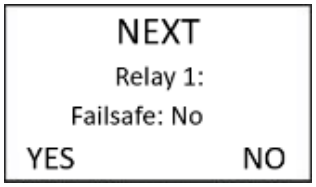


NOTE: With this feature enabled, if any Fault occurs (on any channel) the Fault Relay is engaged. In addition, Relay 3 is removed from all setup options.

2. Fault Relay Latching/Auto Reset: Press *ADD* or *SUB* (Yes/No—as indicated on the display screen) to setup the Relay 3 Fault Relay as latching or auto resetting. To leave the setting as it is, press *MENU* (Next).

NOTE: This screen only appears if Relay 3 was set up as the fault relay.

3. Failsafe: Press *ADD* or *SUB* (Yes/No—as indicated on the display screen) to setup Relay 1 as failsafe (or not failsafe). To leave the setting as it is, press *MENU* (Next).

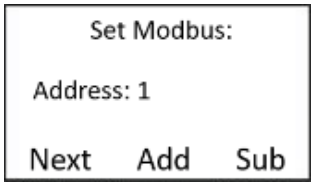


4. Repeat Step 2 for Relays 2 and 3.

5. Fault Terminal Failsafe: Press *ADD* or *SUB* (Yes/No—as indicated on the display screen) to setup the Fault terminal as failsafe (or not failsafe). To leave the setting as it is, press *MENU* (Next).

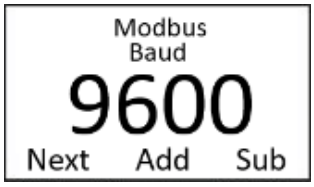
Modbus Settings

1. Global Modbus Address: Press *ADD* (increase) or *SUB* (decrease) to manipulate the global Modbus Address setting (between 1 and 247).



2. Press *MENU* (Next).
3. Global Baud: Press *ADD* (increase) or *SUB* (decrease) to manipulate the global Baud setting to: 4800, 9600, or 19200.

NOTE: Baud default is 9600.



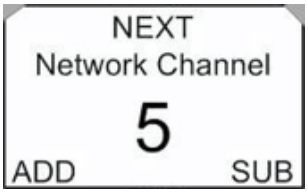
4. Press *MENU* (Next).

WireFree Settings

NOTE: If a repeater is used to connect any AirLink sensors to the monitor, then all AirLink sensor connections must be routed through the repeater; there cannot be a combination of AirLink sensors making direct radio connection to a monitor while other AirLink sensors make radio connection to the monitor through a repeater.

1. Radio Timeout: Press *ADD* (increase) or *SUB* (decrease) to manipulate the radio timeout setting.

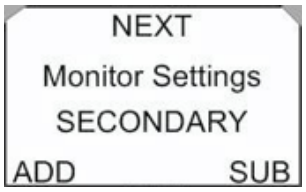
2. Press *MENU*.
3. Network ID: Press *ADD* (increase) or *SUB* (decrease) to manipulate the network ID.



4. Press *MENU*.

5. Primary/Secondary: Press *ADD* (increase) or *SUB* (decrease) to toggle between "Primary" and "Secondary".

NOTE: There can only be one Primary monitor on a network. All other monitors must be set up as Secondary.



6. Press *MENU* (Next) to exit the Advanced Configuration Menu and return to Normal Operating Mode.

Maintenance

Troubleshooting

The troubleshooting guide describes symptoms, probable causes, and recommended action for problems you may encounter with the AirLink 7530.

NOTE: This troubleshooting guide describes AirLink 7530 problems only. See the controller operator's manual for problems you may encounter with the controller.

Table 1: AirLink 7530 Fault Codes

Problem	Cause(s)	Solution(s)
F1	The control board has lost communication with the digital sensor interface adapter board.	1. At the detector head, check connection between the sensor housing connector header and the digital sensor interface adapter board plug-in. 2. At the detector head, replace the sensor interface adapter board
F4	The control board has lost communication with the sensor interface board.	1. Replace the sensor interface board.
F8	• There are two sensors with the same address communicating to the monitor. • There is a combination of AirLink sensors making direct radio connection to the monitor and AirLink sensors with radio connection routed through a repeater.	1. Make sure all sensors are using different addresses. 2. If a repeater is part of the AirLink system, all AirLink sensor radio connections to the monitor must be routed through the repeater.

Table 1: AirLink 7530 Fault Codes

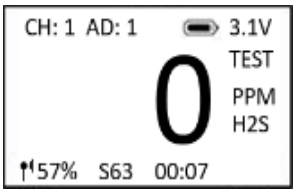
F9	The AirLink 7530 has not received a communication from the faulting address for the time defined in Radio Timeout (10 minutes is the default setting).	1. Locate the faulting sensor and check the battery level, antenna, obstacles, weather, etc.
* *System faults will activate the fault terminal.*		

Relay/Alarm Test

WARNING: For the explosion proof version of the AirLink 7530, do not remove the enclosure lid while the circuits are energized unless the area is determined to be non-hazardous. Keep the enclosure lid tightly closed during operation.

When fully functional, the device is able to notify the user of gas presence at the sensor with a low, high, or danger alarm. To ensure that each of these features are working properly, the following tests should be run periodically. If a test fails, the device may need to be repaired or replaced.

1. Press and hold *MENU* and *SUB* for five seconds to enter Alarm Test Mode.



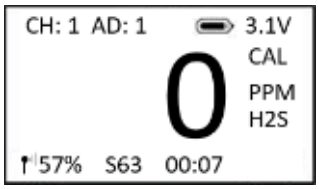
2. The device will illuminate LED “1” and trigger any alarm connected to Relay 1.
3. Continue holding *MENU* and *SUB* for an additional five seconds.
4. The device will illuminate LED “2” and trigger any alarm connected to Relay 2.
5. Continue holding *MENU* and *SUB* for an additional five seconds.
6. The device will illuminate LED “3” and trigger any alarm connected to Relay 3.
7. Release *MENU* and *SUB*.
8. Press *MENU* again to exit Alarm Test Mode and return to Normal Operating Mode.

Calibration

WARNING: ***For the explosion proof version of the AirLink 7530, do not remove the enclosure lid while the circuits are energized unless the area is determined to be non-hazardous. Keep the enclosure lid tightly closed during operation.***

Entering Calibration Mode disables the relays and allows the sensors to be calibrated without triggering alarms. Once in Calibration Mode, the unit will remain in this state for two hours—unless *MENU* is pressed.

1. To enter Calibration Mode, from Normal Operating Mode, press and hold *MENU* and *ADD* for 5 seconds.
2. Once in Calibration Mode, the display screen will show "CAL" on the upper right side.



3. To return to Normal Operating Mode, press *MENU*.

NOTE: If *MENU* is not pressed, the unit will remain in Calibration Mode for two hours.

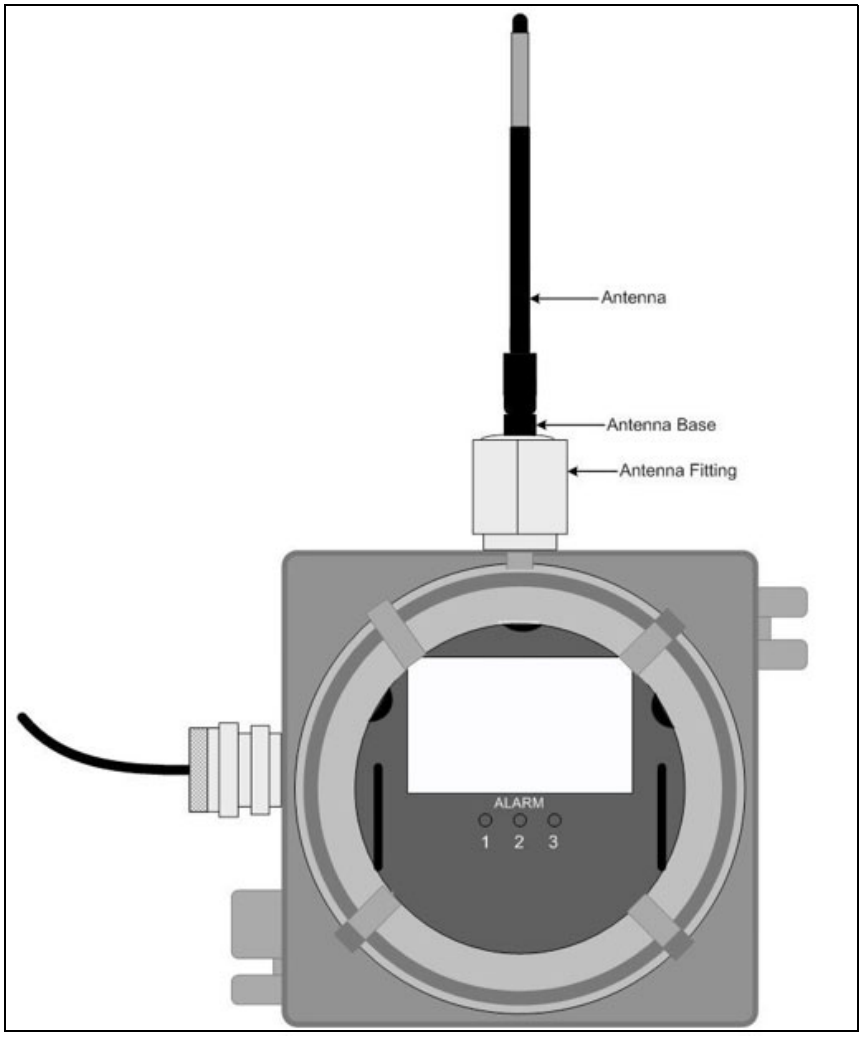
Antenna Replacement

WARNING: ***For the explosion proof version of the AirLink 7530, do not remove the enclosure lid while the circuits are energized unless the area is determined to be non-hazardous. Keep the enclosure lid tightly closed during operation.***

The antenna is used to aid in receiving clear and reliable radio signals from the sensors. The current antenna can be replaced with any antenna supplied by RKI Instruments, Inc. that is compatible with the radio frequency and antenna fitting on the enclosure.

1. Turn off the power source.

2. Unscrew the current antenna at the antenna fitting.



3. Screw the new antenna onto the antenna fitting.
4. Turn the power source back on.

Parts List

Table 2 lists replacement parts and accessories for the AirLink 7530.

Table 2: Parts List

Part Number	Description
47-5111-XX	Cable with connectors for remote-mounted antenna (specify length in 1-foot increment when ordering; maximum length is 100 feet)
71-0553	AirLink 7530 Operator's Manual (this document)
82-0104	Magnetic wand

Modbus Output Register Map

AirLink 7530 Modbus Register Map						
Register Address (Hexadecimal)	**Register Address (Decimal)**	**Data Description**	**R/W**	**Length (In Bits)**	**Units**	**Valid Response**
Radio Data						
1	1	Channel 1 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
2	2	Channel 2 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
3	3	Channel 3 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
4	4	Channel 4 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
5	5	Channel 5 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
6	6	Channel 6 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
7	7	Channel 7 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
8	8	Channel 8 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
9	9	Channel 9 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
A	10	Channel 10 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
B	11	Channel 11 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
C	12	Channel 12 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
D	13	Channel 13 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
E	14	Channel 14 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
F	15	Channel 15 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
10	16	Channel 16 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
11	17	Channel 17 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
12	18	Channel 18 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
13	19	Channel 19 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
14	20	Channel 20 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
15	21	Channel 21 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
16	22	Channel 22 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
17	23	Channel 23 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
18	24	Channel 24 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
19	25	Channel 25 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
1A	26	Channel 26 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
1B	27	Channel 27 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
1C	28	Channel 28 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
1D	29	Channel 29 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
1E	30	Channel 30 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
1F	31	Channel 31 Radio Address	R/W	16	INTEGER	Radio Address (1-255)

20	32	Channel 32 Radio Address	R/W	16	INTEGER	Radio Address (1-255)
21	33	Channel 1 Reading	R	32	FLOAT	Any valid sensor reading
23	35	Channel 2 Reading	R	32	FLOAT	Any valid sensor reading
25	37	Channel 3 Reading	R	32	FLOAT	Any valid sensor reading
27	39	Channel 4 Reading	R	32	FLOAT	Any valid sensor reading
29	41	Channel 5 Reading	R	32	FLOAT	Any valid sensor reading
2B	43	Channel 6 Reading	R	32	FLOAT	Any valid sensor reading
2D	45	Channel 7 Reading	R	32	FLOAT	Any valid sensor reading
2F	47	Channel 8 Reading	R	32	FLOAT	Any valid sensor reading
31	49	Channel 9 Reading	R	32	FLOAT	Any valid sensor reading
33	51	Channel 10 Reading	R	32	FLOAT	Any valid sensor reading
35	53	Channel 11 Reading	R	32	FLOAT	Any valid sensor reading
37	55	Channel 12 Reading	R	32	FLOAT	Any valid sensor reading
39	57	Channel 13 Reading	R	32	FLOAT	Any valid sensor reading
3B	59	Channel 14 Reading	R	32	FLOAT	Any valid sensor reading
3D	61	Channel 15 Reading	R	32	FLOAT	Any valid sensor reading
3F	63	Channel 16 Reading	R	32	FLOAT	Any valid sensor reading
41	65	Channel 17 Reading	R	32	FLOAT	Any valid sensor reading
43	67	Channel 18 Reading	R	32	FLOAT	Any valid sensor reading
45	69	Channel 19 Reading	R	32	FLOAT	Any valid sensor reading
47	71	Channel 20 Reading	R	32	FLOAT	Any valid sensor reading
49	73	Channel 21 Reading	R	32	FLOAT	Any valid sensor reading
4B	75	Channel 22 Reading	R	32	FLOAT	Any valid sensor reading
4D	77	Channel 23 Reading	R	32	FLOAT	Any valid sensor reading
4F	79	Channel 24 Reading	R	32	FLOAT	Any valid sensor reading
51	81	Channel 25 Reading	R	32	FLOAT	Any valid sensor reading
53	83	Channel 26 Reading	R	32	FLOAT	Any valid sensor reading
55	85	Channel 27 Reading	R	32	FLOAT	Any valid sensor reading
57	87	Channel 28 Reading	R	32	FLOAT	Any valid sensor reading
59	89	Channel 29 Reading	R	32	FLOAT	Any valid sensor reading
5B	91	Channel 30 Reading	R	32	FLOAT	Any valid sensor reading
5D	93	Channel 31 Reading	R	32	FLOAT	Any valid sensor reading
5F	95	Channel 32 Reading	R	32	FLOAT	Any valid sensor reading
61	97	Channel 1 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
62	98	Channel 2 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
63	99	Channel 3 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
64	100	Channel 4 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
65	101	Channel 5 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
66	102	Channel 6 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below

67	103	Channel 7 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
68	104	Channel 8 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
69	105	Channel 9 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
6A	106	Channel 10 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
6B	107	Channel 11 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
6C	108	Channel 12 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
6D	109	Channel 13 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
6E	110	Channel 14 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
6F	111	Channel 15 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
70	112	Channel 16 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
71	113	Channel 17 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
72	114	Channel 18 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
73	115	Channel 19 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
74	116	Channel 20 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
75	117	Channel 21 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
76	118	Channel 22 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
77	119	Channel 23 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
78	120	Channel 24 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
79	121	Channel 25 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
7A	122	Channel 26 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
7B	123	Channel 27 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
7C	124	Channel 28 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
7D	125	Channel 29 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
7E	126	Channel 30 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
7F	127	Channel 31 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
80	128	Channel 32 Mode	R	16	ENUMERATION	0-7 See Mode Enumeration Below
81	129	Channel 1 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
83	131	Channel 2 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
85	133	Channel 3 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
87	135	Channel 4 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
89	137	Channel 5 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
8B	139	Channel 6 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
8D	141	Channel 7 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
8F	143	Channel 8 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
91	145	Channel 9 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
93	147	Channel 10 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
95	149	Channel 11 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
97	151	Channel 12 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
99	153	Channel 13 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)

9B	155	Channel 14 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
9D	157	Channel 15 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
9F	159	Channel 16 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
A1	161	Channel 17 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
A3	163	Channel 18 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
A5	165	Channel 19 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
A7	167	Channel 20 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
A9	169	Channel 21 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
AB	171	Channel 22 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
AD	173	Channel 23 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
AF	175	Channel 24 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
B1	177	Channel 25 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
B3	179	Channel 26 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
B5	181	Channel 27 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
B7	183	Channel 28 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
B9	185	Channel 29 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
BB	187	Channel 30 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
BD	189	Channel 31 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
BF	191	Channel 32 Battery	R	32	FLOAT	Sensor Input Voltage(>= 0.0)
C1	193	Channel 1 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
C2	194	Channel 2 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
C3	195	Channel 3 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
C4	196	Channel 4 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
C5	197	Channel 5 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
C6	198	Channel 6 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
C7	199	Channel 7 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
C8	200	Channel 8 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
C9	201	Channel 9 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
CA	202	Channel 10 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
CB	203	Channel 11 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
CC	204	Channel 12 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
CD	205	Channel 13 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
CE	206	Channel 14 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
CF	207	Channel 15 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
D0	208	Channel 16 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
D1	209	Channel 17 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
D2	210	Channel 18 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
D3	211	Channel 19 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
D4	212	Channel 20 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout

D5	213	Channel 21 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
D6	214	Channel 22 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
D7	215	Channel 23 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
D8	216	Channel 24 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
D9	217	Channel 25 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
DA	218	Channel 26 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
DB	219	Channel 27 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
DC	220	Channel 28 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
DD	221	Channel 29 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
DE	222	Channel 30 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
DF	223	Channel 31 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
E0	224	Channel 32 Sec Since Last Message	R	16	INTEGER	-1-32768 Secs, -1 = never. Staying 0 = timeout
E1	225	Channel 1 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
E2	226	Channel 2 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
E3	227	Channel 3 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
E4	228	Channel 4 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
E5	229	Channel 5 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
E6	230	Channel 6 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
E7	231	Channel 7 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
E8	232	Channel 8 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
E9	233	Channel 9 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
EA	234	Channel 10 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
EB	235	Channel 11 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
EC	236	Channel 12 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
ED	237	Channel 13 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
EE	238	Channel 14 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
EF	239	Channel 15 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
F0	240	Channel 16 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
F1	241	Channel 17 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
F2	242	Channel 18 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
F3	243	Channel 19 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
F4	244	Channel 20 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
F5	245	Channel 21 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
F6	246	Channel 22 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
F7	247	Channel 23 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
F8	248	Channel 24 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
F9	249	Channel 25 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
FA	250	Channel 26 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
FB	251	Channel 27 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below

FC	252	Channel 28 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
FD	253	Channel 29 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
FE	254	Channel 30 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
FF	255	Channel 31 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
100	256	Channel 32 Sensor Type	R	16	ENUMERATION	0-31 See Sensor Type Enumeration Below
101	257	Channel 1 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
102	258	Channel 2 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
103	259	Channel 3 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
104	260	Channel 4 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
105	261	Channel 5 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
106	262	Channel 6 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
107	263	Channel 7 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
108	264	Channel 8 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
109	265	Channel 9 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
10A	266	Channel 10 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
10B	267	Channel 11 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
10C	268	Channel 12 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
10D	269	Channel 13 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
10E	270	Channel 14 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
10F	271	Channel 15 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
110	272	Channel 16 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
111	273	Channel 17 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
112	274	Channel 18 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
113	275	Channel 19 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
114	276	Channel 20 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
115	277	Channel 21 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
116	278	Channel 22 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
117	279	Channel 23 Gas type	R	16	ENUMERATION	0-127 See Gas Enumeration below
118	280	Channel 24 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
119	281	Channel 25 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
11A	282	Channel 26 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
11B	283	Channel 27 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
11C	284	Channel 28 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
11D	285	Channel 29 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
11E	286	Channel 30 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
11F	287	Channel 31 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
120	288	Channel 32 Gas Type	R	16	ENUMERATION	0-127 See Gas Enumeration below
121	289	Channel 1 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
122	290	Channel 2 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below

123	291	Channel 3 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
124	292	Channel 4 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
125	293	Channel 5 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
126	294	Channel 6 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
127	295	Channel 7 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
128	296	Channel 8 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
129	297	Channel 9 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
12A	298	Channel 10 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
12B	299	Channel 11 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
12C	300	Channel 12 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
12D	301	Channel 13 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
12E	302	Channel 14 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
12F	303	Channel 15 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
130	304	Channel 16 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
131	305	Channel 17 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
132	306	Channel 18 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
133	307	Channel 19 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
134	308	Channel 20 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
135	309	Channel 21 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
136	310	Channel 22 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
137	311	Channel 23 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
138	312	Channel 24 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
139	313	Channel 25 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
13A	314	Channel 26 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
13B	315	Channel 27 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
13C	316	Channel 28 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
13D	317	Channel 29 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
13E	318	Channel 30 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
13F	319	Channel 31 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
140	320	Channel 32 Fault	R	16	ENUMERATION	0-15 See Fault Enumeration below
141	321	Channel 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
142	322	Channel 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
143	323	Channel 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
144	324	Channel 4 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
145	325	Channel 5 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
146	326	Channel 6 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
147	327	Channel 7 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
148	328	Channel 8 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
149	329	Channel 9 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on

14A	330	Channel 10 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
14B	331	Channel 11 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
14C	332	Channel 12 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
14D	333	Channel 13 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
14E	334	Channel 14 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
14F	335	Channel 15 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
150	336	Channel 16 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
151	337	Channel 17 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
152	338	Channel 18 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
153	339	Channel 19 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
154	340	Channel 20 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
155	341	Channel 21 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
156	342	Channel 22 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
157	343	Channel 23 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
158	344	Channel 24 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
159	345	Channel 25 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
15A	346	Channel 26 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
15B	347	Channel 27 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
15C	348	Channel 28 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
15D	349	Channel 29 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
15E	350	Channel 30 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
15F	351	Channel 31 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
160	352	Channel 32 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
161	353	Channel 1 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
162	354	Channel 2 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
163	355	Channel 3 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
164	356	Channel 4 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
165	357	Channel 5 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
166	358	Channel 6 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
167	359	Channel 7 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
168	360	Channel 8 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
169	361	Channel 9 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
16A	362	Channel 10 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
16B	363	Channel 11 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
16C	364	Channel 12 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
16D	365	Channel 13 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
16E	366	Channel 14 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
16F	367	Channel 15 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
170	368	Channel 16 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on

171	369	Channel 17 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
172	370	Channel 18 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
173	371	Channel 19 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
174	372	Channel 20 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
175	373	Channel 21 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
176	374	Channel 22 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
177	375	Channel 23 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
178	376	Channel 24 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
179	377	Channel 25 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
17A	378	Channel 26 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
17B	379	Channel 27 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
17C	380	Channel 28 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
17D	381	Channel 29 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
17E	382	Channel 30 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
17F	383	Channel 31 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
180	384	Channel 32 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
181	385	Channel 1 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
182	386	Channel 2 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
183	387	Channel 3 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
184	388	Channel 4 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
185	389	Channel 5 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
186	390	Channel 6 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
187	391	Channel 7 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
188	392	Channel 8 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
189	393	Channel 9 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
18A	394	Channel 10 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
18B	395	Channel 11 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
18C	396	Channel 12 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
18D	397	Channel 13 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
18E	398	Channel 14 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
18F	399	Channel 15 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
190	400	Channel 16 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
191	401	Channel 17 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
192	402	Channel 18 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
193	403	Channel 19 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
194	404	Channel 20 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
195	405	Channel 21 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
196	406	Channel 22 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
197	407	Channel 23 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high

198	408	Channel 24 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
199	409	Channel 25 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
19A	410	Channel 26 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
19B	411	Channel 27 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
19C	412	Channel 28 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
19D	413	Channel 29 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
19E	414	Channel 30 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
19F	415	Channel 31 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
1A0	416	Channel 32 Relay 1 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
1A1	417	Channel 1 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1A3	419	Channel 2 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1A5	421	Channel 3 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1A7	423	Channel 4 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1A9	425	Channel 5 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1AB	427	Channel 6 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1AD	429	Channel 7 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1AF	431	Channel 8 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1B1	433	Channel 9 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1B3	435	Channel 10 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1B5	437	Channel 11 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1B7	439	Channel 12 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1B9	441	Channel 13 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1BB	443	Channel 14 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1BD	445	Channel 15 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1BF	447	Channel 16 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1C1	449	Channel 17 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1C3	451	Channel 18 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1C5	453	Channel 19 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1C7	455	Channel 20 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1C9	457	Channel 21 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1CB	459	Channel 22 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1CD	461	Channel 23 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1CF	463	Channel 24 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1D1	465	Channel 25 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1D3	467	Channel 26 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1D5	469	Channel 27 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1D7	471	Channel 28 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1D9	473	Channel 29 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1DB	475	Channel 30 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0

1DD	477	Channel 31 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1DF	479	Channel 32 Relay 1 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
1E1	481	Channel 1 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1E2	482	Channel 2 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1E3	483	Channel 3 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1E4	484	Channel 4 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1E5	485	Channel 5 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1E6	486	Channel 6 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1E7	487	Channel 7 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1E8	488	Channel 8 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1E9	489	Channel 9 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1EA	490	Channel 10 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1EB	491	Channel 11 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1EC	492	Channel 12 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1ED	493	Channel 13 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1EE	494	Channel 14 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1EF	495	Channel 15 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1F0	496	Channel 16 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1F1	497	Channel 17 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1F2	498	Channel 18 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1F3	499	Channel 19 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1F4	500	Channel 20 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1F5	501	Channel 21 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1F6	502	Channel 22 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1F7	503	Channel 23 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1F8	504	Channel 24 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1F9	505	Channel 25 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1FA	506	Channel 26 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1FB	507	Channel 27 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1FC	508	Channel 28 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1FD	509	Channel 29 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1FE	510	Channel 30 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
1FF	511	Channel 31 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
200	512	Channel 32 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
201	513	Channel 1 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
202	514	Channel 2 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
203	515	Channel 3 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
204	516	Channel 4 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
205	517	Channel 5 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on

206	518	Channel 6 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
207	519	Channel 7 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
208	520	Channel 8 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
209	521	Channel 9 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
20A	522	Channel 10 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
20B	523	Channel 11 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
20C	524	Channel 12 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
20D	525	Channel 13 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
20E	526	Channel 14 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
20F	527	Channel 15 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
210	528	Channel 16 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
211	529	Channel 17 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
212	530	Channel 18 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
213	531	Channel 19 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
214	532	Channel 20 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
215	533	Channel 21 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
216	534	Channel 22 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
217	535	Channel 23 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
218	536	Channel 24 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
219	537	Channel 25 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
21A	538	Channel 26 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
21B	539	Channel 27 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
21C	540	Channel 28 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
21D	541	Channel 29 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
21E	542	Channel 30 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
21F	543	Channel 31 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
220	544	Channel 32 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
221	545	Channel 1 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
222	546	Channel 2 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
223	547	Channel 3 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
224	548	Channel 4 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
225	549	Channel 5 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
226	550	Channel 6 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
227	551	Channel 7 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
228	552	Channel 8 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
229	553	Channel 9 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
22A	554	Channel 10 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
22B	555	Channel 11 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
22C	556	Channel 12 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high

22D	557	Channel 13 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
22E	558	Channel 14 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
22F	559	Channel 15 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
230	560	Channel 16 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
231	561	Channel 17 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
232	562	Channel 18 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
233	563	Channel 19 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
234	564	Channel 20 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
235	565	Channel 21 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
236	566	Channel 22 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
237	567	Channel 23 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
238	568	Channel 24 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
239	569	Channel 25 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
23A	570	Channel 26 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
23B	571	Channel 27 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
23C	572	Channel 28 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
23D	573	Channel 29 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
23E	574	Channel 30 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
23F	575	Channel 31 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
240	576	Channel 32 Relay 2 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
241	577	Channel 1 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
243	579	Channel 2 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
245	581	Channel 3 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
247	583	Channel 4 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
249	585	Channel 5 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
24B	587	Channel 6 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
24D	589	Channel 7 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
24F	591	Channel 8 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
251	593	Channel 9 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
253	595	Channel 10 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
255	597	Channel 11 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
257	599	Channel 12 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
259	601	Channel 13 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
25B	603	Channel 14 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
25D	605	Channel 15 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
25F	607	Channel 16 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
261	609	Channel 17 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
263	611	Channel 18 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
265	613	Channel 19 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0

267	615	Channel 20 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
269	617	Channel 21 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
26B	619	Channel 22 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
26D	621	Channel 23 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
26F	623	Channel 24 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
271	625	Channel 25 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
273	627	Channel 26 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
275	629	Channel 27 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
277	631	Channel 28 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
279	633	Channel 29 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
27B	635	Channel 30 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
27D	637	Channel 31 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
27F	639	Channel 32 Relay 2 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
281	641	Channel 1 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
282	642	Channel 2 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
283	643	Channel 3 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
284	644	Channel 4 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
285	645	Channel 5 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
286	646	Channel 6 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
287	647	Channel 7 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
288	648	Channel 8 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
289	649	Channel 9 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
28A	650	Channel 10 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
28B	651	Channel 11 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
28C	652	Channel 12 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
28D	653	Channel 13 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
28E	654	Channel 14 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
28F	655	Channel 15 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
290	656	Channel 16 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
291	657	Channel 17 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
292	658	Channel 18 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
293	659	Channel 19 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
294	660	Channel 20 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
295	661	Channel 21 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
296	662	Channel 22 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
297	663	Channel 23 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
298	664	Channel 24 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
299	665	Channel 25 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
29A	666	Channel 26 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch

29B	667	Channel 27 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
29C	668	Channel 28 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
29D	669	Channel 29 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
29E	670	Channel 30 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
29F	671	Channel 31 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
2A0	672	Channel 32 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
2A1	673	Channel 1 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2A2	674	Channel 2 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2A3	675	Channel 3 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2A4	676	Channel 4 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2A5	677	Channel 5 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2A6	678	Channel 6 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2A7	679	Channel 7 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2A8	680	Channel 8 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2A9	681	Channel 9 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2AA	682	Channel 10 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2AB	683	Channel 11 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2AC	684	Channel 12 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2AD	685	Channel 13 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2AE	686	Channel 14 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2AF	687	Channel 15 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2B0	688	Channel 16 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2B1	689	Channel 17 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2B2	690	Channel 18 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2B3	691	Channel 19 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2B4	692	Channel 20 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2B5	693	Channel 21 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2B6	694	Channel 22 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2B7	695	Channel 23 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2B8	696	Channel 24 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2B9	697	Channel 25 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2BA	698	Channel 26 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2BB	699	Channel 27 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2BC	700	Channel 28 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2BD	701	Channel 29 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2BE	702	Channel 30 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2BF	703	Channel 31 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2C0	704	Channel 32 Relay 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
2C1	705	Channel 1 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high

2C2	706	Channel 2 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2C3	707	Channel 3 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2C4	708	Channel 4 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2C5	709	Channel 5 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2C6	710	Channel 6 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2C7	711	Channel 7 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2C8	712	Channel 8 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2C9	713	Channel 9 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2CA	714	Channel 10 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2CB	715	Channel 11 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2CC	716	Channel 12 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2CD	717	Channel 13 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2CE	718	Channel 14 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2CF	719	Channel 15 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2D0	720	Channel 16 Relay 3Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2D1	721	Channel 17 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2D2	722	Channel 18 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2D3	723	Channel 19 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2D4	724	Channel 20 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2D5	725	Channel 21 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2D6	726	Channel 22 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2D7	727	Channel 23 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2D8	728	Channel 24 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2D9	729	Channel 25 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2DA	730	Channel 26 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2DB	731	Channel 27 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2DC	732	Channel 28 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2DD	733	Channel 29 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2DE	734	Channel 30 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2DF	735	Channel 31 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2E0	736	Channel 32 Relay 3 Rise/Fall	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
2E1	737	Channel 1 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
2E3	739	Channel 2 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
2E5	741	Channel 3 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
2E7	743	Channel 4 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
2E9	745	Channel 5 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
2EB	747	Channel 6 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
2ED	749	Channel 7 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
2EF	751	Channel 8 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0

2F1	753	Channel 9 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
2F3	755	Channel 10 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
2F5	757	Channel 11 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
2F7	759	Channel 12 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
2F9	761	Channel 13 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
2FB	763	Channel 14 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
2FD	765	Channel 15 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
2FF	767	Channel 16 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
301	769	Channel 17 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
303	771	Channel 18 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
305	773	Channel 19 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
307	775	Channel 20 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
309	777	Channel 21 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
30B	779	Channel 22 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
30D	781	Channel 23 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
30F	783	Channel 24 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
311	785	Channel 25 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
313	787	Channel 26 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
315	789	Channel 27 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
317	791	Channel 28 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
319	793	Channel 29 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
31B	795	Channel 30 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
31D	797	Channel 31 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
31F	799	Channel 32 Relay 3 Set Point	R/W	32	FLOAT	Any number 65000 or less and higher than 0
321	801	Channel 1 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
322	802	Channel 2 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
323	803	Channel 3 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
324	804	Channel 4 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
325	805	Channel 5 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
326	806	Channel 6 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
327	807	Channel 7 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
328	808	Channel 8 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
329	809	Channel 9 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
32A	810	Channel 10 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
32B	811	Channel 11 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
32C	812	Channel 12 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
32D	813	Channel 13 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
32E	814	Channel 14 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
32F	815	Channel 15 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch

330	816	Channel 16 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
331	817	Channel 17 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
332	818	Channel 18 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
333	819	Channel 19 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
334	820	Channel 20 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
335	821	Channel 21 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
336	822	Channel 22 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
337	823	Channel 23 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
338	824	Channel 24 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
339	825	Channel 25 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
33A	826	Channel 26 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
33B	827	Channel 27 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
33C	828	Channel 28 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
33D	829	Channel 29 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
33E	830	Channel 30 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
33F	831	Channel 31 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
340	832	Channel 32 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
Modbus and Build Data						
1771	6001	Modbus Address	R	16	INTEGER	1 – 247
1772	6002	Modbus Baud Rate	R	16	INTEGER	Any Valid Baud Rate. See Below.
1773	6003	Month	R	16	INTEGER	1 – 12
1774	6004	Day	R	16	INTEGER	1 – 31
1775	6005	Year	R	16	INTEGER	2009 –
1776	6006	Serial Number Character	R	16	ENUMERATION	0 – 52 See Serial Number below
1777	6007	Serial Number	R	32	LONG INT	1 – 99999
Settings in Startup Menu						
177B	6011	Restore to Factory Default	R	16	ENUMERATION	When read will be 0.
177C	6012	Relay 3 as Fault Relay	R	16	ENUMERATION	0 – 1, 0 means normal relay, 1 means Fault Relay
177D	6013	Relay 1 Fail Safe	R	16	ENUMERATION	0 – 1, 0 means not Fail Safe, 1 means Fail Safe
177E	6014	Relay 2 Fail Safe	R	16	ENUMERATION	0 – 1, 0 means not Fail Safe, 1 means Fail Safe
177F	6015	Relay 3 Fail Safe	R	16	ENUMERATION	0 – 1, 0 means not Fail Safe, 1 means Fail Safe
1780	6016	N/A	R	16		Read as 0.
1781	6017	Fault Terminal Fail Safe	R	16	ENUMERATION	0 – 1, 0 means not Fail Safe, 1 means Fail Safe
1782	6018	Radio Timeout	R	16	INTEGER	6-255. This is the timeout in minutes.
1783	6019	Network Channel	R	16	INTEGER	1—78
1784	6020	Primary Secondary	R	16	ENUMERATION	0 – 1, 0 means Primary, 1 means Secondary.
Relays in Alarm State						
1785	6021	Relay 1 is in Alarm	R	16	ENUMERATION	0 – 1, 0 means not in Alarm, 1 means in Alarm
1786	6022	Relay 2 is in Alarm	R	16	ENUMERATION	0 – 1, 0 means not in Alarm, 1 means in Alarm

1787	6023	Relay 3 is in Alarm	R	16	ENUMERATION	0 – 1, 0 means not in Alarm, 1 means in Alarm
17A4	6052	Monitor Supply Voltage	R	32	FLOAT	Supply voltage in volts
Diagnostics Data						
2704	9988	Reset	R/W	16	INTEGER	Read 0. If user sets to 1, resets the unit.
2705	9989	Serial Receive Good Count	R	16	UINT	0 – 65535
2706	9990	Serial Receive Error Count	R	16	UINT	0 – 65535
2707	9991	Serial Transmit Good Count	R	16	UINT	0 – 65535
2708	9992	Serial Transmit Error Count	R	16	UINT	0 – 65535
2709	9993	Radio Receive Good Count	R	16	UINT	0 – 65535
270A	9994	Radio Receive Error Count	R	16	UINT	0 – 65535
270B	9995	Radio Transmit Good Count	R	16	UINT	0 – 65535
270C	9996	Radio Transmit Error Count	R	16	UINT	0 – 65535
270D	9997	Uptime Days	R	16	UINT	0 – 65535
270E	9998	Uptime Hours	R	16	UINT	0 – 65535
270F	9999	Uptime Minutes	R	16	UINT	0 – 65535

MODE SENSOR	MODE
0	NORMAL
1	NULL
2	CALIBRATION
3	RELAY
4	Radio ADD
5	Diagnostic/ Batt
6	Advanced Menu
7	Admin Menu

Valid Baud Rates
4800
9600
19200

Serial Number Char	Char
1	A
2	B
3	C
4	D
5	E
6	F
7	G
8	H
9	I
10	J
11	K
12	L

SENSOR TYPE NUM	SENSOR
0	EC
1	IR
2	CB
3	MOS
4	PID
5	TANK
6	4-20
7	SWITCH
8	Unknown
31	None Selected

FAULT	FAULT
0	None
1	Sensor Timeout
2	Sensor reading below null (152 Model Only)
3	Replace sensor element (LPIR Only)
4	ADC not responding

13	M
14	N
15	O
16	P
17	Q
18	R
19	S
20	T
21	U
22	V
23	W
24	X
25	Y
26	Z
27	AA
28	AB
29	AC
30	AD
31	AE
32	AF
33	AG
34	AH
35	AI
36	AJ
37	AK
38	AL
39	AM
40	AN
41	AO
42	AP
43	AQ
44	AR
45	AS
46	AT
47	AU
48	AV
49	AW
50	AX
51	AY
52	AZ

5	Null Failed
6	Cal Failed
7	Future Error
8	Two Sensors Same Address
9	Sensor Radio Timeout
10	When Sensor is wired, it means no sensor is connected
11	Rapid temperature change (LPIR Only)
12	Sensor Element Restarting (LPIR Only)
13	Unspecified Error on sensor unit. Shown only on Monitor
14	No Primary Monitor at Sensor Head
15	Monitor Fault

GAS TYPE NUM	GAS
0	H2S
1	SO2
2	O2
3	CO
4	CL2
5	CO2
6	LEL
7	VOC
8	FEET
9	HCl
10	NH3
11	H2
12	ClO2
13	HCN
14	F2
15	HF
16	CH2O
17	NO2
18	O3
19	INCHES
20	4-20
21	Not Specified
22	Cº
23	Fº
24	CH4
25	NO
26	PH3
27	HBr
28	EtO
29	CH3SH
30	AsH3
31	R410A
32	R1234YF
33	R32
34..N	Future Gases