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TECHNICAL SERVICE BULLETIN: 2023-01

Date: September 2023

Subject: End of Production of AMI P2 Oxygen Sensor and Analyzer Impacts



P2 Sensor (0-50%) Discontinued



P3 Sensor (0-25% Oxygen)



P5 Sensor (0-25% Oxygen & <500ppm H₂S)



P4 Sensor (0-100% Oxygen)

Description of Change:

AMI's Model P2 Oxygen sensor is being discontinued and will no longer be available once current inventories are depleted.

AMI's Model P3 and P4 oxygen sensors are the replacement sensor to use in AMI oxygen analyzers that were originally configured for P2 Sensors. The choice of replacement sensor is dependent on the desired measurement range in your application.

If the expected measurement range is between 0 to 25% oxygen you should use the P3 or P5 sensor

If you expected measurement range will be exceeding 25% oxygen you should use the P4 Sensor.

If you are using an AMI probe Model 60 with a P2 Sensor, there is no available replacement sensor.



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What the Customers Must Do

The switch from a P2 sensor to a P3 or P4 sensor will impact the behavior of the analyzer. The change will require either updating the configuration variables in the analyzer. The updated of the variables can be easily done by the customer for many of impacted AMI analyzers.

Analyzers impacted and update procedure number:

210BX - follow procedure 1

210BR, 201RS, 201RSP, or Watchdog (percent version) - follow procedure 2

1000RS - follow procedure 3

201LC – must be Returned to factory for updating

Model 60 - unfortunately there is no option for updating this product.

Option for AMI Factory Update of Analyzer:

The customer has the option to send their impacted AMI analyzer to the AMI factory for updating. This step is <u>required for the Model 201LC</u>.

The AMI factory will perform a full evaluation of the analyzer and bring it up to the latest standard. This will include calibration with the desired P3 or P4 sensor.

The customer will be responsible for the cost of shipping the analyzer to the AMI factory, the new sensor as well as any other non-warranty repairs required. AMI will cover the costs of updating software, calibration and return shipment to the customer.

For this option request a RMA # at <u>www.amio2.com/request-rma/</u> Be sure to specify what sensor type you want the analyzer updated to. You will receive instructions for shipment to the AMI factory.

AMI's Command Center Software Required

AMI's free Command Center Software is required to perform update Procedures 1, 2 or 3.

The customer can register and download the Command Center software at no charge from the AMI website <u>www.amio2.com/login/</u>.



The customer also will need the appropriate cable to connect their computer to the analyzer. The connection to the analyzer will be a USB Type B plug. A 10 foot USB Type B to USB Type A cable to connect a computer to the AMI analyzer can be purchased from **AMI under part # 3CAB03**.



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How to use Command Center to change AMI Analyzer variables

The analyzer will need to be in a non-flammable, safe environment. The analyzer will need to be powered and a USB cable connected from the AMI analyzer to a computer where the Command Center software program installed and running.



1. Verify the analyzer is communicating with Command Center. On the bottom right click the variables tab.





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2. You will see that the "Password" is off and the color is red. To enter the password, click the user input.

COMMAND CENTER - D X													
COMMAND CENTER Build Date: 3/19/2019 - 7:22:17 AM	3/1	3/14/2023 - 10:47:58 Polling Enabled											
VARIABLES INTERFACE	POLLING	1 Sec 🖨	COM36,57600	Analyzer Softw	vare Version: v5.2	8 Analyzer I		A0 M	odbus ID: 17				
User input	VARI	ABLES	REFRESH	EXPORT Polle	d Vars are Gree	en Pas	sword Off						
ANALYZER OUTPUT CLEAR CPUT	VAR	VALUE		SCRIPTION	CLASS	COMMENT	s 🔨	RESPONSE	1	^			
AORH 111 AORPO 54	B	20.9%	Current Curren	ading put range	Main displ		לו ה	10:47:57 AM 10:47:57 AM	2				
A0RP1 47 A0RP2 10 A0RP3 3	с	v5.28	Sof	ware version	Info			10:47:44 AM	3				
A0RP4 14 A0RP5 3	D E0	1814 3700	Cal Hig	factor h range offset	Main displ Debug		-	10:47:57 AM 10:47:45 AM	5				
AORTO 75 AORTO 75	E1	36 Re	efresh Bเ	itten	Debug			10:47:45 AM	6				
A0RT3 2177 A0RW 0	E2	1000	Hig	h range gain	Debug	Passw	vord S	tatus	7				
A0RX 0 A0RH 111	E3 E4	10650	Ou	put zer onset put span	Output info			10:47:52 AM	8				
A0RY 0 A0RH 111	E5	13199	Hei	ter control	Debug		1	10:47:45 AM	10				
AORZ 0	E6	0	0 Set	output to zero	Output info		1	10:47:57 AM	11				
Datalog Download (Raw Data)	E6	0	1 Set	output to mid scale	Output info			10:47:57 AM	12				
	E6	1	2 Set 3 No	security	Main displ			10:47:57 AM	13				
	E6	0	4 Spa	n security	Main displ		1	10:47:57 AM	15				
	E6	1	5 Per	cent unit	Main displ		1	10:47:57 AM	16				
	E6	0	6 Per	cent unit - 1000ppm range	Main displ		1	10:47:57 AM	17				
	E6	0	7 Per 8	cent unit - 100% range	Main displ Debug	Bits 8-15 defin	ne the butto	10:47:57 AM	18				
~ ·	E6	0	9		Debug	1 = Alarm 1 b	button	10:47:57 AM	20	~			
HOME VARIABLES													

- 3. A pop up will appear asking for a userID and password. The user ID can be left as is, "None" and the password is, "AMI".
- 4. Clicking on submit will enter it and change the password indicator to "ON" and the color green. The variables can now be changed.
- 5. Follow the procedure below appropriate for your AMI analyzer to change the variables.

🖌 Submit Passwo — 🗆 🗙	× X downwo comer													- 0	×								
USERD None	ENTER - 7:22:17 AM	VER. 8.0	CLOSE CO	м		2010V3	User ID: Nor	w ³⁷	3/14/2023 - 10:49:12 Polling Enabled				COMMAND CENT Build Date: 3/13/2013 - 7.22.17	ER 1	VER. 8.0	CLOSE CO	COM		2010V	User ID:	one ³⁷	14/2023 - 10 Polling Enal	1:49:38 bled
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AGRO 900 D 1814 Cal factor			Califactor	Main displ		10:49:11 AM	4		AORP6 23	23			D	1814	-	Callector	Main dis	st	10.49:36 AM	4			
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Datalog Download (Raw Data	s)	55	0	2	Set output to span	Overview		10:49:09 AM	13		D	atalog Down	load (Raw Data)		15	0	2	Set output to scars	Orbiti		10-09-36 AM		
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		85	0	4	Span security	Main displ		10:49:09 AM	15						E5	0	4	Sper security	Nan de	s	10.09:36 AM	15	
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		66	0	6	Percent unit - 1000ppm nange	Main displ		10:49:09 AM	17						ES	0	6	Percent unit - 1000ppm range	Main dis	x	10.09:36 AM	17	
		E6	0	7	Percent unit - 100% range	Main displ		10:49:09 AM	18						ES	0	7	Percent unit - 100% range	Main di	s	10.49.36 AM	18	
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Procedure 1: Updating a 210BX

Changing to a P3 or P5 Sensor (0-25%)

- 1. With command center open verify the following variables
 - a. Variable B is set to "11"
 - b. Variable E6 Bit 5 is set to "1"
- 2. Change the Variable E0 from "P2" to "P3" and click the variable field to the left to save the new value to memory.
- 3. Verify the change was accepted by clicking the Refresh button.
- 4. If the variable was accepted, the analyzer is ready for air calibration with a P3 sensor and to be put back into service.

Changing to a P4 Sensor (0-100%)

- 1. With Command Center open verify the following variables
 - a. Variable B is set to "11"
 - b. Variable E6 Bit 5 is set to "1"
- 2. With command Center open change the following variables
 - a. Change Variable E6 Bit to "1" and click the variable field to the left to save the value to memory.
 - b. Change Variable E0 from "P2" to "P4" and click the variable field to the left to save the new value to memory.
- 3. Verify the changes were accepted by clicking the Refresh button.
- 4. If the variables were accepted, in the User Input field in Command Center type REBOOT and hit enter.
- 5. Once the analyzer has rebooted, the analyzer is ready for air calibration with the P4 sensor.





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Procedure 2: Updating a 210BR, 201RS, 201RSP, or Watchdog (percent version)

Changing to a P3 or P5 Sensor (0-25%)

- 1. With command center open verify the following variables
 - a. Variable B is set to "11"
 - b. Variable D is set to "2000"
 - c. Variable E0 is set to "3600"
 - d. Variable E2 is set to "1000"
 - e. Variable E6 Bit 5 is set to "1"
- 2. Change the Variable E1 from "26" to "36" and click the variable field to the left to save the new value to memory.
- 3. Verify the change was accepted by clicking the Refresh button.
- 4. If the variable was accepted, the analyzer is ready for air calibration with a P3 sensor and to be put back into service.

Changing to a P4 Sensor (0-100%)

[Note this is only for use when measuring 0-50% O2 like original range of P2 Sensor]

- 1. With command center open verify the following variables
 - a. Variable B is set to "11"
 - b. Variable D is set to "1850"
 - c. Variable E0 is set to "3600"
 - d. Variable E2 is set to "1000"
 - e. Variable E6 Bit 5 is set to "1"
- 2. Change the Variable E1 from "26" to "36" and click the variable field to the left to save the new value to memory.
- 3. Verify the change was accepted by clicking the Refresh button.
- 4. If the variable was accepted, the analyzer is ready for air calibration with a P4 sensor and to be put back into service.









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Procedure 3: Updating a 1000RS

Changing to a P3 or P5 Sensor (0-25%)

- 1. With command center open verify the following variables
 - a. Variable B is set to "11"
 - b. Variable D is set to "1850"
 - c. Variable E0 is set to "3850"
 - d. Variable E2 is set to "800"
 - e. Variable E6 Bit 5 is set to "1"
- 2. Change the Variable E1 from "30" to "40" and click the variable field to the left to save the new value to memory.
- 3. Verify the change was accepted by clicking the refresh button.
- 4. If the variable was accepted, the analyzer is ready for air calibration with a P3 or P5 sensor and to be put back into service.

