**Technical Bulletin**

**IZMS HART Installation**

**Kit Part# 56705A0001**

---

**SPECIFICATIONS**

- **Communication:** HART version 6
- **Loop Power (excitation):** 24 vdc
- **Output:** 4-20mA dc, 2-wire
- **Loop Resistance:** 500 ohms (max) at 24 vdc
- **Cable Recommended:** 2 conductor; stranded, 18-24 AWG, shielded with ground

---

**INSTALLATION**

HART board hardware for installation to an IZMS flowmeter

1. Remove the X9 terminal block from the Junction board indicated to the right.
2. Remove the 4 indicated screws holding the Junction board to the Main circuit board (see manual AIC2040 page 1-5, Figure 1-5).
3. Place the screws and washers to the side for reuse when installing the HART board.
4. Install M3 x 10mm standoffs to the 4 HART mount location indicated on the Junction circuit board positions indicated to the right.
5. Fasten the HART board to the Junction board using the screws removed in step 2.
6. Connect prewired CS3-BUS connector to corresponding X9 socket located on the Junction board.

---

**Zero Trim**

1. Apply loop power to the HART transmitter board after applying power to the IZMS converter.
2. Connect the HART communication device across the transmitter terminals. The signal loop must have at least 250 ohms resistance for HART communication device function.
3. Turn on the HART communication device. Wait until communications are established and the Home Menu is displayed.
4. If the Process Value is not within specification after stabilization:
   1. Select Calibration
   2. Select D/A trim
   3. Select “OK” to acknowledge WARN-LOOP remove from auto control
   4. Select “OK” to acknowledge connection of mA indicator
   5. Select “OK” to acknowledge setting field deviation output to 4mA.
   6. Enter indicated mA value and acknowledge with selecting “OK”
   7. Acknowledge indicated mA adjustment with “YES/NO” then select “OK”
   8. Select “OK” to acknowledge setting field deviation output to 20mA.
   9. Enter indicated mA value and acknowledge with selecting “OK”
   10. Acknowledge indicated mA adjustment with “YES/NO” then select “OK”
   11. Select “OK” to acknowledge loop returning to original output
   12. Select “OK” to acknowledge NOTE return to auto control

---

**NOTE:**

- HART output will fault at 3.85mA with loss of IZMS signal.
- Disconnecting the CS-3 terminal while operating the flowmeter will cause temporary loss of measurement.
IZM HART Flowchart

Flow Rate Units
Q-Typ
Units
mdim

Current Mode
Meter Out Damp(Tp3)

PV URV
USL
LSL
Average
Damping
Vmin
LFS

Output Mode
pv1
Tp1
pv2
Tp2

it1
it2
it3
it4

Span
Offset

m.spe
p.spe
n.spe
b.spe

D/A Trim
Loop Test
Dac Zero
Dac Full

DN
Pipe Detect
Standby Mode
Parameter Mode
Switch Position

Factory Cal Parameters
System Cal Parameters
Loop Current Cal

V1 Format
V2 Format
Decimal Pt.
Display Mode

User C2:
System SS:
Appli SA:

erpsum
eparasum
nparasum

Manufacturer
Model
Dev id
Num req preams

Message
Tag
Descriptor
Date
Poll addr
Final assembly num

Fixed Info
User Info
Revision Data

Universal rev
Fid dev rev
Software rev
Hardware rev