



ARMSTRONG INTELLIGENT MONITORING

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AD5000

AD5000 Acoustic Monitoring

Armstrong Intelligent Monitoring Model AD5000 is a wireless monitoring technology designed to monitor acoustic patterns associated with leaking gasses and high pressure fluids. The AIM™ AD5000 is the ideal solution to identify leaking isolation or safety relief valves. Identifying the source quickly can reduce the use of flare to burn off product and the costly fines that may be associated with it. Instant notification helps to minimize material and production loss. Ultimately, the AD5000 can help cut down on environmental fines, reduce product recirculation and improve safety by instantly identifying the leak source. Using non-intrusive technology combined with WirelessHART, the AIM™ AD5000 is the ideal solution for any temporary or permanent 24/7 acoustic monitoring.



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Technical Information Product Datasheet Specifications

Output	WirelessHART 2.4 GHz
Local Display (if applicable)	Liquid Crystal Display Viewing Area: 1.34" x 0.55" (34 mm x 14 mm)
Temperature Operating Range	With display: -30°C to 80°C (-22°F to 176°F) Without display: -40°C to 90°C (-40°F to 194°F)
Max Pipe Temperature	315°C (600°F) - Heat sink required
Materials of Construction	Housing – Aluminum Paint – Powder Coat O-ring – Nitrile Stem – 304 SS Antenna – Nylon 6,6 Nameplate - 304 SS
Battery Type	Tadiran Lithium Ion Model – TLH-5920
Weight	2.2 lbs (1 Kg)



Product Certifications

Factory Mutual (FM) Approval   	
<i>United States</i>	Intrinsic Safe for Class I/II/III, Division 1, Groups A, B, C, D, E, F, and G Zone Rating: Zone 0, AEx ia IIC Temperature Code: T3 Ambient Temperature Range: T _{amb} -40°C to 90°C (-40°F to 194°F) For use with TADIRAN model TLH-5920 lithium ion battery only Standards used for Certification: FM3600, FM3610, FM3810, ANSI/ISA 60079-0, ANSI/ISA 60079-11
<i>Canada</i>	Intrinsic Safe for Class I/II/III, Division 1, Groups A, B, C, D, E, F, and G Zone Rating: Zone 0, Ex ia IIC Temperature Code: T3 Ambient Temperature Range: T _{amb} -40°C to 90°C (-40°F to 194°F) For use with TADIRAN model TLH-5920 lithium ion battery only Standards used for Certification: CSA 1010.1, CSAC22.2No.157, CSAC22.2No.25,CAN/CSAE60079-0, CAN/CSA60079-11
<i>European Certification</i>	ATEX Intrinsic Safety Ex ia IIC T3 Ambient Temperature Range: T _{amb} -40°C to 90°C (-40°F to 194°F) For use with TADIRAN model TLH-5920 lithium ion battery only Standards used for Certification: EN60079-0,EN60079-11, EN 60079-26
<i>IECEx Certification</i>	Equipment Protection Level: Ga Gas/Vapour: EX ia IIC T3 Ambient Temperature Range: T _{amb} -40°C to 90°C (-40°F to 194°F) For use with TADIRAN model TLH-5920 lithium ion battery only Standards used for Certification: IEC 60079-0, IEC 60079-11, IEC 60079-26



For more information, please contact the Smart Services Group at 269-273-1415 or at smartservices@armstronginternational.com.

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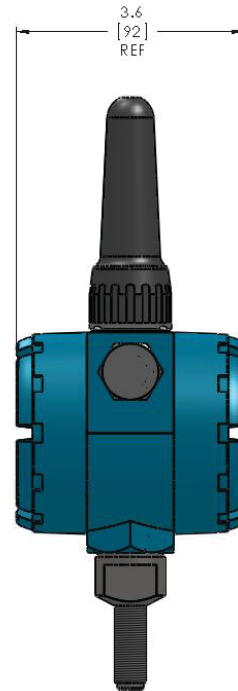
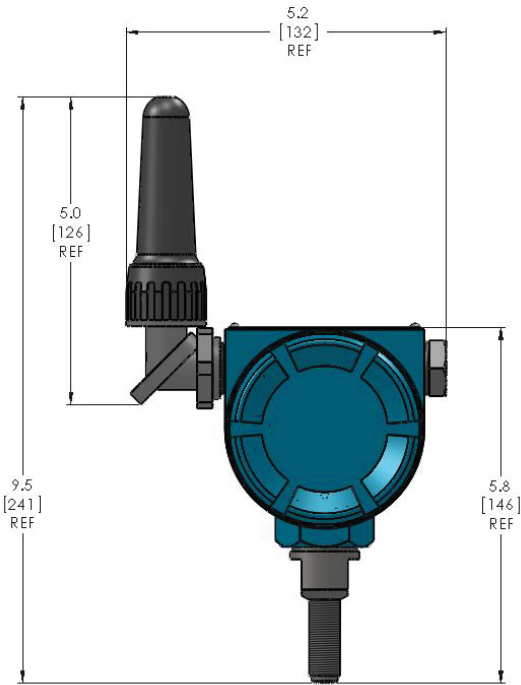
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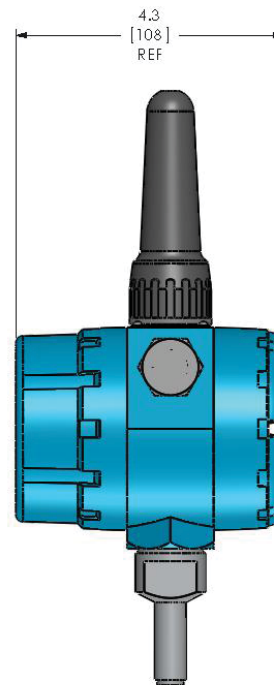
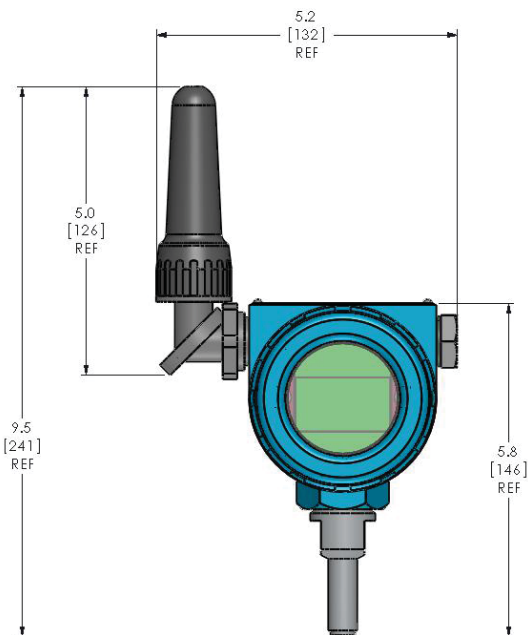
Models AD500, ST5700, and TD5100 without display screen

inches
[mm]



Models AD500, ST5700, and TD5100 with display screen

inches
[mm]



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Ordering Procedure

Monitoring Device

A		AD - Acoustic Monitor
D		ST - Steam Trap Monitor
5	5	TD - Temperature Monitor
0		0 - Acoustic Monitor
0	0	7 - Steam Trap Monitor
0	0	1 - Temperature Monitor
D		Blank * - No Display, Unprogrammed
P		D - Display
		P - Programmed
		DP - Display, Programmed

* Standard

Example Part Numbers:

Transmitter: ST5700P, AD5000DP

Mounting Hardware: WG3, TG12

Heat Sink: HS400

Mounting Hardware

W		WG - Waveguide (AD and ST Only)
G		TG - TempGuide (TD Only)
3		Pipe Size
X		3-15-20 mm (1/2" or 3/4") 16-100 mm (4")
		4-25 mm (1") 20-125 mm (5")
		5-32 mm (1-1/4") 24-150 mm (6")
		6-40 mm (1-1/2") 32-200 mm (8")
		8-50 mm (2") 40-250 mm (10")
		10-65 mm (2-1/2") 48-300 mm (12")
		12-80 mm (3")

Heat Sink Hardware (for mounting surface in excess of 200°C (400°F))

H	H	
S	S	
4		Mounting Surface Temp
0		200 - 260°C (400 - 400 to 500°F)
0		260 - 315°C (500 - 501 to 600°F)

Available AIM Devices

Acoustic Monitoring

- Immediate notification of release to flare to significantly mitigate emission losses.
- Immediate identification of occurrence location for quick response to process upset.
- Ability to detect "sizzling" of relief valve for proactive maintenance scheduling.
- Pre-emptive warning of hazardous vapor releases.
- Ability to validate losses via integrated software.

Steam Trap Monitoring

- Immediate notification of steam trap failure.
- Reduces energy and emissions loss significantly.
- Immediate identification of failure location for quick response/action.
- Ability to integrate to CMMS systems for proactive maintenance scheduling.
- Ability to validate losses via integrated software.

Temperature Monitoring

- Monitor skin temperature on equipment, tanks, valves and piping.

