



ARMSTRONG INTELLIGENT MONITORING

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TD5100

TD5100 Temperature Monitoring

The Armstrong Intelligent Monitoring Model TD5100 is a temperature monitoring solution that allows you to tackle critical temperature problems. The AIM™ TD5100 can wirelessly monitor the skin temperature of any pipe, vessel or piece of equipment. Using non-intrusive technology combined with WirelessHART, the AIM™ TD5100 is the ideal solution for any temporary or permanent 24/7 temperature 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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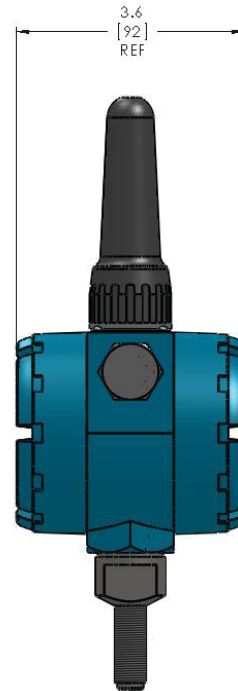
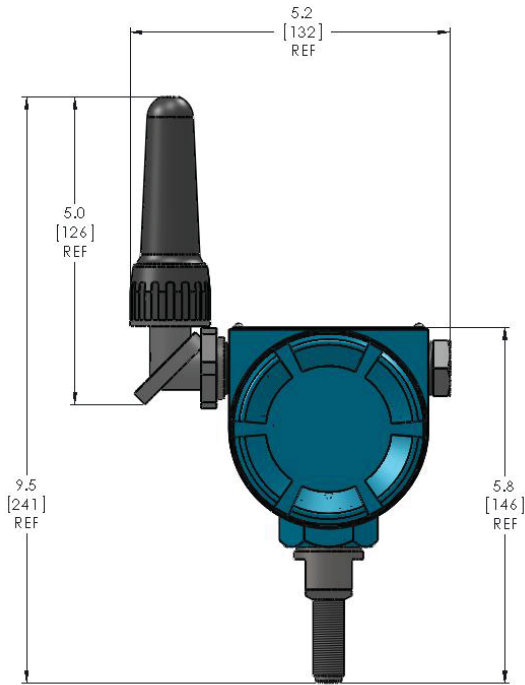
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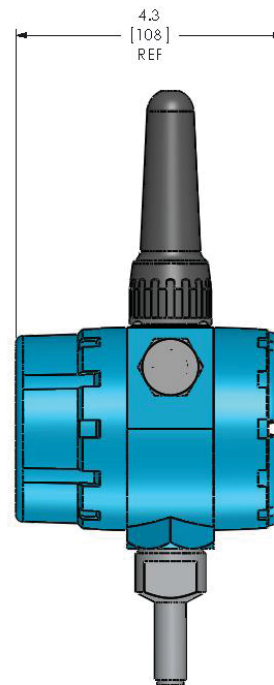
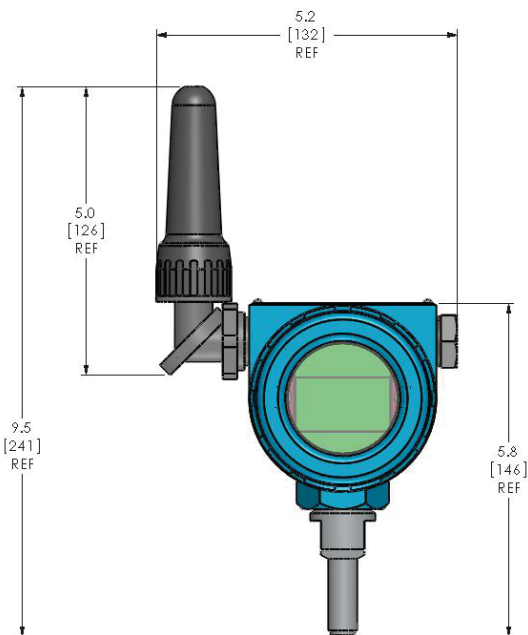
Models AD500, ST5700, and TD5100 without display screen

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	TD - Temperature Monitor
0	0 - Acoustic Monitor
0	7 - Steam Trap Monitor
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.

