



# Process Level Transmitter & Tank Gauge



Introducing the *Levelese* continuous liquid level system, the *simple*, price, value and accuracy leader for your liquid level measuring needs.

Specified, patented and designed by engineers with half a century's individual experience in level instrumentation, *Levelese* has been designed to operate in the most stringent environments ranging from marine oil storage, acidic, material transportation vessels to rivers and streams. *Levelese* is not affected by turbulence and the actual depth of the vessel, such as a deep well.

*Levelese* continuous level monitors are:

- Easy to install and maintain
- Highly reliable
- Without moving parts
- Possess wide rangeability from 3 ft to more than 166 ft
- With negligible sensing errors
- Operate in explosive, corrosive and extreme environments

## HOW IT WORKS

Using the principle of buoyancy the *Levelese* level measuring system weighs



an inert chain, secured below the fluid surface, determines the inverse of liquid level and converts it to an

analog or digital electronic signal for indication, alarming or continuous or on-demand transmission.



LOAD CELL

## Applications:

- Wine, Alcohol & Soft Drinks
- Petroleum Production Tanks
- Petroleum & Chemical Tanks
- Well water level
- River & Dam Monitoring
- Bunker Fuel Level
- Fuel Tank Level
- Open Channel Flow

## Specifications:

Level Ranges: 6 inches to 166 ft

Ranges:

0-3 Ft to 0-166 Ft.

Suppressed Zero Ranges

(Absolute depth of fluid does not affect the measured range)

Materials of construction: low copper powder coated Aluminum, Stainless steel, HDPE (Optional Conductive HDPE)

4" NPT or flange fitting

Space for 1 1/2 " sample bottle

Accuracy: Better than ±0.15% FS

Linearity: Better than 0.98% FS

Hysteresis: Better than 0.03% FS

Temperature range: -30 to +65°C

Power required, various for application

- 12 Vdc @ 22 mA for transmitters
- 117 VAC, 24 VDC w/Displays
- Rechargeable batteries

## Output/Display:

4-20 mA

HART®, Fieldbus® wireless & smart transmitters, Modbus®, Ethernet® Wireless

Bargraph w/3 Digit Display

4 1/2 Digit LCD Display

Multi-point SCADA, Graphic

## Accessories:

100Ω Pt 385 RTD

Stream Mounting Kit

XP or Intrinsically Safe

Certification for IS level systems,

Class I, Div 1, Groups C&D



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## SPECIFICATIONS

Level Ranges 3-166 Ft

- 0-3 ft
- 0-10 ft
- 0-30 ft
- 0-150 ft
- 0-166 ft

Suppressed Zero Ranges

Materials of construction: low copper powder coated aluminum, stainless steel

4" NPT or Flange Fittings

Accuracy: Better than +/- 0.15% F.S.

Linearity: Better than 0.98% F.S

Hysteresis: Better than 0.03% F.S

Temperature Range: -30 to 65 Deg C.

Ambient Temperature Effect:

Zero: > 2% of Span/Deg C or 5uA

Span: 0.01% of Span/Deg C

Output/Display

4-20 mA, Hard Wired or Wireless

HART, Fieldbus, Modbus, Ethernet

Bargraph w/3 Digit Display

4 1/2 Digit LCD Display

Multi-point SCADA, Graphic

Space for 1 1/2 " Sample Bottle

Accessories:

Pt100, 385 RTD

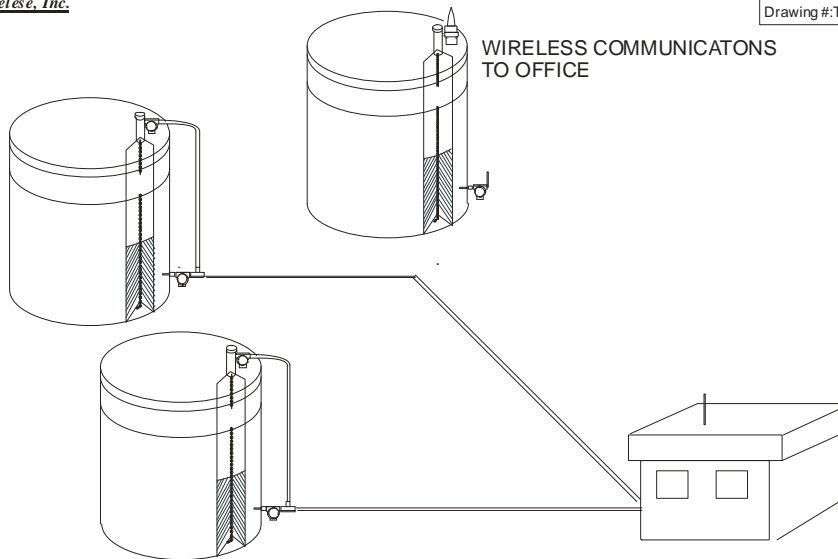
Stream Mounting Kit

XP or Intrinsic Safe Certification

Class I, Div 1 or 2, Groups C&D

Levelese, Inc.

Drawing #: TANK LEVEL-TEMPERATURE SYSTEM



Note All instruments  
 on tanks explosion proof or  
 certified intrinsically safe  
 CLASS 1, DIV 1, GROUPS C&D

Description: Tank Level-Temperature System

Material:

Drawn By: SAO

Date: 11-01-08

Checked by:

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Phone: 720-333-3447

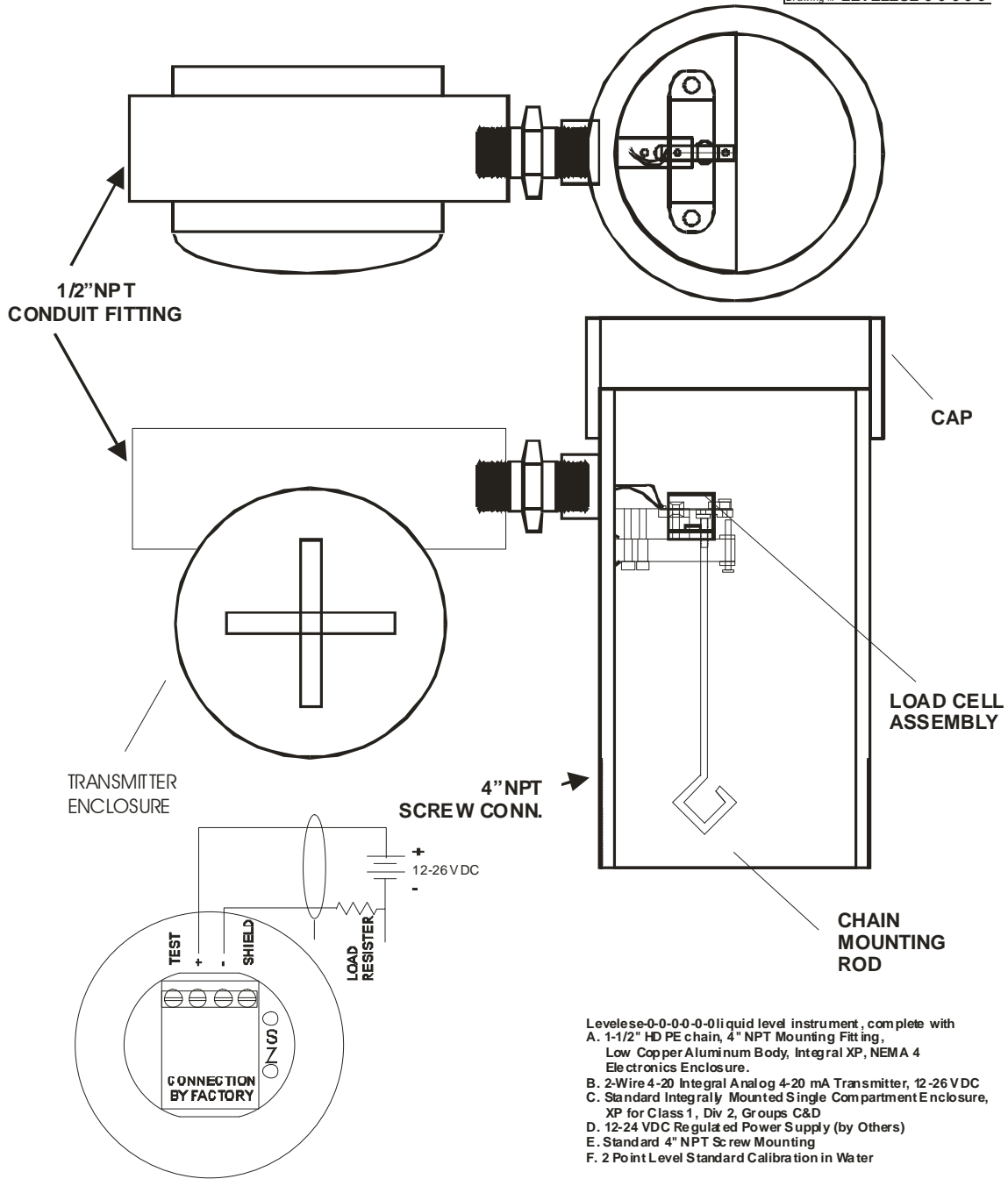


## Process Level Transmitter & Tank Gauge

HOW TO ORDER	Body	Output	Pwr	IS	Mount	Cal	Description
Levelese Level Sensor	0						Levelese continuous liquid level transmitter, complete with 1-1/2" HDPE chain, 4" NPT Mounting Fitting, Low Copper Aluminum Body, Integral XP, NEMA 4 Electronic Enclosure.
							Accuracy: Better than +/-0.15% FS
							Linearity: Better than 0.98% FS
							Hysteresis: Better than 0.03% FS
							Temperature Range: -30 to +65 Deg C
	2						Other Materials or Pressure Ratings
	3						316 Stainless Steel Body & Parts
	1 PVC						PVC Body, 316 SS Chain Attachment, Viton Diaphragm Seal, Integral NEMA4X Polycarbonate Dual-Compartment Electronic Enclosure
		0					2-Wire 4-20 Integral Analog 4-20 mA Transmitter, 12-26 VDC
		1					1200 Ohm Load Cell, 5-12 VDC Excitation, 2 mV/V Output
		2					Levelese™ MODBUS™ Transmitter
		3					HART™, FIELDBUS Smart 2-Wire Transmitter
		4					900 MH Wireless Transmitter
		5					2.4 GH Wireless Transmitter
		6					Other Output Options
			0				12-24 VDC Regulated Power Supply (by Others)
			1				117 VAC Power Supply, External, for 6 Sensors
			2				Rechargeable batteries in Enclosure on Sensor
			3				Solar Rechargeable batteries with Enclosure
				0			Standard Integrally Mounted Single Compartment Enclosure, XP for Class 1, Div 2, Groups C&D
				1			NEMA4X Corrosive Service, Dual Compartment Enclosure Standard Service
				2			XP, Dual Compartment Enclosure, for Class 1, Div 2, Groups
				3			Certified XP Enclosure for Class I, Iv 2, Groups B, C, D
				4			Certified XP or IS for Class I, Div1, Groups C & D
				5			Conductive HDPE Sensor Chain
					0		Standard 4" NPT Screw Mounting
					1		Low-Pressure (150 psi) Aluminum Pipe Flange Fitting 4" Pipe Size X 9" OD
					2		Low-Pressure (150 psi) Aluminum Pipe Flange Fitting 6" Pipe Size X 9" OD
					3		Low-Pressure (150 psi) Aluminum Pipe Flange Fitting 8" Pipe Size X 9" OD
					4		Other Materials or Pressure Ratings
						0	2 Point Level Standard Calibration in Water
						1	3 Point Level Calibration in Water
						2	5 Point Level Calibration in Water
						3	Other Calibration

Level Inc.

Drawing # LEVELESE-0-0-0-0-0



- Levelse-0-0-0-0-0 liquid level instrument, complete with
- A. 1-1/2" HD PE chain, 4" NPT Mounting Fitting, Low Copper Aluminum Body, Integral XP, NEMA 4 Electronics Enclosure.
- B. 2-Wire 4-20 Integral Analog 4-20 mA Transmitter, 12-26 VDC
- C. Standard Integrally Mounted Single Compartment Enclosure, XP for Class 1, Div 2, Groups C&D
- D. 12-24 VDC Regulated Power Supply (by Others)
- E. Standard 4" NPT Screw Mounting
- F. 2 Point Level Standard Calibration in Water

Description: LEVELESE-0-0-0-0-0 LEVEL SENSOR			
Material:			
Drawn By: SAO	Date: 05-05-09	Checked by: SKIP	Phone: 303-586-1425