

# HYPO TRAK™

## SODIUM HYPOCHLORITE MONITORING SYSTEM

VAPOR LOCK ALARM - "NO FEED" CONDITION	WARNS OF EXCESSIVE CHLORATE FORMATION	TRACKS DEGRADING HYPO STRENGTH	FOR USE WITH ALL OF OUR SCALES & SENSORS
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**ALARMS:**

#1 ALARM TYPE  
PUMP VAPOR LOCK

#1 ALARM TYPE  
CHLORATE WARNING

#1 ALARM TYPE  
HIGH LEVEL

#1 ALARM TYPE  
LOW LEVEL



PATENT PENDING

**HYPO INFO:**

HYPO = 266.5 LB  
STRENGTH 12.7 %

#1 ALARM TYPE  
PUMP VAPOR LOCK

HYPO = 266.5 LB  
LB/HR= 10.2

HYPO = 266.5 LB  
DAYS OLD 47

*"All the easy-to-use features of the SOLO G2 indicator plus new hypo-specific information and control!"*

Feeding and tracking sodium hypochlorite usage in municipal water treatment systems has presented a challenge for end users for many years. First, sodium hypochlorite degrades over time which makes inventory control and usage documentation very tricky. Secondly, when hypo degrades, it releases gas bubbles that can often get trapped in feed tubing and pumps causing inconsistent feed and in some cases a "vapor lock" of the pump itself. Lastly, as sodium hypochlorite loses strength, it forms byproducts called chlorates. Chlorates are known to impair thyroid function, and therefore

regulatory officials are beginning to regulate how much chlorate can be in the water supply, and more specifically, how much chlorate can be contributed to the water supply from the source sodium hypochlorite.

By integrating specialized software with our simple weighing / level display, the Hypo Trak can easily monitor the following: 1) an inconsistent or no feed rate condition via loss in weight (or level) to warn of a vapor locked pump, 2) integrated timers that track how old the hypo is to warn of an excessive chlorate condition, 3) degradation curves that

allow you to track your hypo strength over time as it loses strength and 4) conversions that allow you to view & track your hypo in terms of 100% pure chlorine gas to simplify inventory control, PPM calculations, and usage documentation.



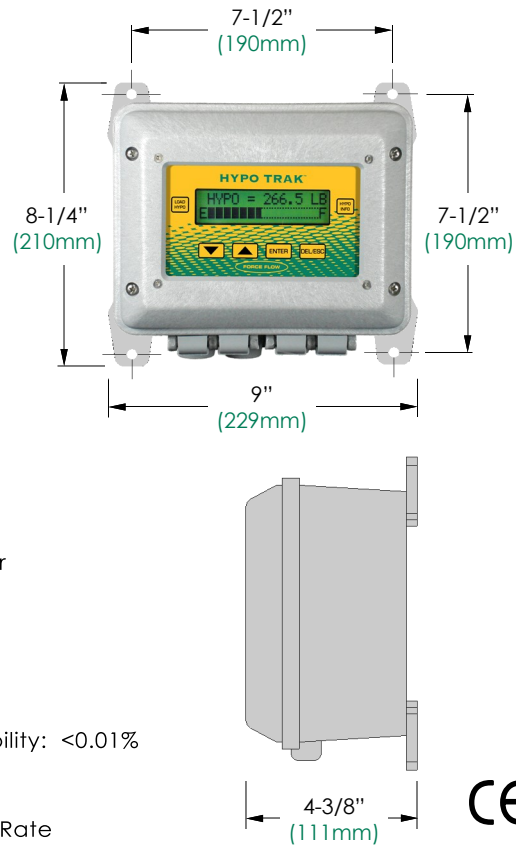
**HYPO TRAK™****SODIUM HYPOCHLORITE MONITORING SYSTEM****MODELS & ORDERING INFORMATION****MODEL:** HT-1**INPUT:** Electronic load cell or ultrasonic sensor**OUTPUT:** (2) 4-20mA outputs and (4) relays**READOUT SPECS:** 32 character, backlit, alphanumeric LCD**NUMERICAL DISPLAY:** 6 full digits (999,999)**BAR GRAPH DISPLAY:** User adjustable 0-100%**FILTERING:** User adjustable box car averaging**DISPLAY UNITS:** lb, kg, gallon, liter. Up to 999,999**INCREMENTS:** 0.1, 0.2, 0.5, 1, 2, 5, 10, 20 or 50**ZERO/TARE ADJUSTMENT:** Via keypad**OPERATING TEMPERATURE:** 32-122 Degrees F (0-50 Degrees C)**INPUT POWER:** 110-250 VAC (50-60 Hz, 5 watts) or 24VDC**CONNECTORS:** 4-20mA & Relays: 1/2" Nylon Conduit Connector

Load Cells &amp; Ultrasonic Sensors: 1/2" Nylon Cord Connector

**ENCLOSURE:** NEMA 4X, UL listed structural foam molded**PERFORMANCE:** Overall System Accuracy: 0.1-0.25% F.S.,

Non-linearity: &lt;0.03% F.S., Hysteresis: &lt;0.02% F.S., Non-Repeatability: &lt;0.01%

F.S., Thermal Stability: &lt;0.002/Deg F, Zero and Span

**DATA:** Net Weight, Strength %, Age, 100% CL2 Equivalent, Feed Rate**ALARMS:** Pump Vapor Lock, Chlorate Warning, High Level, Low Level**RELAYS:** Form C Dry Contact, 2A@30VDC, 0.5A@120VAC**CONTACT CLOSURE INPUT:** Disables VAPOR LOCK ALARM when pump intentionally off. Internally pulled up to +5 VDC.**TYPICAL SPECIFICATION FOR SODIUM HYPOCHLORITE MONITORING SCALE OR ULTRASONIC SENSOR****SCALES**

A quantity of \_\_\_\_\_ scale(s) shall be provided and shall be of the digital readout/electronic load cell type. Scale(s) shall be of the single load cell design. Flexible cable shall connect load cell to indicator to allow easy remote installation of the readout. Cable length shall be \_\_\_\_\_ feet (meters).

**ULTRASONIC SENSORS**

A quantity of \_\_\_\_\_ ultrasonic sensor(s) shall be provided and shall be of the 4-20mA output design. Flexible cable shall connect sensor(s) to indicator to allow for easy remote installation of the readout. Cable length shall be \_\_\_\_\_ feet (meters).

**HYPO TRAK INDICATOR**

Weight/Level Indicator shall carry CE marking and shall be housed in a NEMA 4X, UL approved enclosure. LCD readout shall have backlighting for readability in low light conditions. Numerical display shall have 6 full active digits and adjust-

able bar graph to display remaining hypo in lbs or gallons. In addition, indicator shall display hypochlorite concentration, hypo feed rate, age of hypo in days and equivalent lbs of pure chlorine gas. Three user programmable degradation curves shall be available for various temperature conditions and/or hypochlorite characteristics. Indicator shall output net inventory via a 4-20mA signal for remote monitoring.

Indicator shall display and have relay contacts for the following alarm conditions: High Chlorate, Vapor Locked Pump, Low Level and High Level.

Scale/Ultrasonic Sensor shall be Model \_\_\_\_\_ and digital display shall be HYPO TRAK Sodium Hypochlorite Monitoring System manufactured by Force Flow, 2430 Stanwell Drive, Concord, CA 94520 USA.

Please see individual scale bulletins for model numbers and additional information. Specifications, literature and drawings available online at [www.forceflow.com](http://www.forceflow.com)

**FORCE FLOW**