



# Indicator Feature Comparison Guide



CENTURY



SOLO XT



SOLO G2



HYPO TRAK



WIZARD 4000

Wizard 4000®

SOLO G2®

SOLO XT®

Century®

Hypo Trak®

## CHANNELS

### Per Indicator

When more than one scale is used at a single location, multiple channels on a single instrument saves money, and allows easy grouping and totaling of multiple tanks.

1, 2, 3, 4

1 or 2

1

1

1

## OUTPUT SIGNALS

### Net Weight (4-20mA)

Remotely monitoring chemical inventories reduces field labor, and increases safety by reducing operator exposure to chemicals.

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### Gross Weight (4-20mA)

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### Feed Rate (4-20mA)

"Rate by loss in weight" allows cross checking chlorinators, metering pumps and volumetric feeders because pump or feeder speeds are not always indicative of chemical feed rates. Can eliminate the need for expensive transmitting flow meters.

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### Daily Used (4-20mA)

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### Amount Remaining In Bulk Supply (4-20mA)

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### Total Net Weight - All Channels Combined (4-20mA)

PLC's have a limited number of inputs. By sending the total net weight of all channels, users can reduce the need for additional input cards on their PLC.

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### MODBUS Protocol via RS485

Bi-directional PLC access to virtually all software functions on field mounted weight indicators.

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## ALARMS

### Low Net Weight

Non contacting/Non intrusive design eliminates problems associated with corrosion & fouling of conventional level sensors. Can be used as level alarms or for transfer pump control. Prevents running out of chemical or feed pumps from running dry.

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### High Net Weight

Non contacting/Non intrusive design eliminates problems associated with the corrosion & fouling of conventional level sensors. Can be used as level alarms or for transfer pump shut down. Prevents overfilling of tanks and resulting chemical spills.

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### Low Feed Rate

Helps prevent underfeeding of critical chemicals like chlorine by giving the user an early warning of a low feed rate condition. Early warning of a Vapor locked hypo pump can be detected with a "No feed" condition.

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### High Feed Rate

Helps prevent overfeeding of critical chemicals like Fluoride by giving the user an early warning of a high feed rate condition. Serious consequences to Dialysis patients and immune compromised individuals can result from excessive Fluoride feed.

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### Minimum Daily Used

Warns of insufficient chemical fed over a period of 24 hours.

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### Maximum Daily Used

Helps prevent overfeeding of critical chemicals like Fluoride by giving the user an early warning of a high feed rate condition. Serious consequences to Dialysis patients and immune compromised individuals can result from excessive Fluoride feed.

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### Supply Exhausted

System gives an alarm signal when both a low level signal and a no feed rate condition are detected. Assures that chemical tanks like chlorine ton containers and cylinders are not returned to the chemical supplier in a partially full condition.

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### Slow Refill

For systems using our Dilution or Auto Refill Controllers, an alarm condition is created when a predetermined time period has been exceeded.

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### Load Cell Failure

Gives an alarm signal when the load cell is detected to be out of normal operating range. Excellent for troubleshooting.

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### Multi-Setpoint

Allows more than one level setpoint to be dedicated to each scale (channel).

Up to 4

Up to 4

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### Auto Refill Control (ARC)

Multiple setpoints and imbedded logic allow fully automatic or semi automatic refilling of chemical day tanks from Bulk chemical tanks.

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√ = Standard Opt. = Optional -- = Not Available

## INDICATOR FEATURE COMPARISON GUIDE (continued)

### RELAY TYPES

#### Solid State

Allows interfacing inductive loads (Electric motors for pump control) up to 3 amps without damaging the indicator electronics. Dry contacts do not optically isolate the electric motors and the resulting start/stop voltage surge can damage indicator or electronics.

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#### Dry Contact

Recommended for triggering alarms. Not dependent on inductive load for operation. Allows interfacing PLC's and other SCADA that may not draw any current.

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#### Max Allowable Relays Per Indicator

12

4

1

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### INDICATOR FUNCTIONS

#### Net Weight

The gross weight minus any tank tare weight. Requires the use of a tare adjust knob or digital keyboard to enter tare weight. Push button "Auto Zero" functions will not allow the net weight to be displayed on pre-filled chemical tanks.

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#### Gross Weight

Net contents plus tank tare weight.

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#### Daily Used

Automatic calculation of daily usages. The tank load key pauses and projects usage accumulation during chemical re-supply to maintain accurate usage data over multiple tank loads.

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#### Usage "Pause & Project"

Allows user to track chemical usage from a tank that is simultaneously being re-filled. This feature plays an important role for chemicals like fluoride and chlorine where accurate usage documentation is critical.

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#### Amount Used (Cumulative)

Chemical usage since the last time the accumulator was cleared. Allows obtaining weekly, monthly or yearly totals for budgeting and purchasing purposes.

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#### Days 'Til Empty

Number of days remaining before re-supply is necessary. Calculated by measuring the remaining inventory and dividing it by the current daily feed rate. Excellent for planning inventory reorder times.

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#### 31 Day Usage Log

Records and stores the usage data for each of the prior 31 days. Excellent for monthly reporting, regulatory compliance and trouble shooting your chemical feed system.

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#### Alarm Log

Indicator stores the most recent 10 alarm conditions with a time and date of occurrence.

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#### Feed Rate

"Rate by loss in weight" allows cross checking chlorinators, metering pumps and volumetric feeders because pump or feeder speeds are not always indicative of chemical feed rates. Can eliminate the need for expensive transmitting flow meters.

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#### Time & Date

Allows for time and date stamps on all usage data and process alarms.

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#### Total Net Weight (All Channels Combined)

Allows quick and easy inventory totalizing of multiple tank banks.

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#### Total Used (All Channels Combined)

Allows quick and easy totalizing of usage in multiple tank banks.

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#### Total Feed Rate (All Channels Combined)

Allows quick and easy feed rate totalizing of multiple tank banks.

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#### Percent Full Display / Bar Graph

A weight value does not necessarily tell a user "how full" a tank is and thus leaves the possibility for overfilling a tank. After entering a weight value that represents 100% full, the operator will always know how full a tank is and therefore reduces the possibility for chemical spills.

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#### Tare Adjust

Allows for adjusting and viewing net chemical weight information. Especially important on pre-filled chemical tanks, cylinders and drums. A "Push Button Zero" function is not equivalent to a Tare Adjust function.

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#### Auto Tare

If the net contents of a cylinder or drum is known, the Auto Tare function allows users to automatically load the net contents, while the remainder of the load is allocated to tare weight.

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√ = Standard Opt. = Optional -- = Not Available

## INDICATOR FEATURE COMPARISON GUIDE (continued)

### INDICATOR FUNCTIONS (continued)

#### Adjustable Channel ID Numbers

For installations that have multiple weighing indicators on site, This feature allows the user to assign and independent 2 digit ID number to each scale channel. This assures that no measurements are confused in any way.

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#### Independent Channel Calibration

Allows each channel on our multi-channel instruments to be independently calibrated to maximize scale resolution and accuracy. For example, a 0-8000 lbs scale and a 0-200 lbs scale could be connected to each of 2 channels with no loss in accuracy.

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#### Independent Channel Capacity

Allows each channel on our multi-channel instruments to be calibrated independently.

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#### EZ Auto Calibration

Used for ultrasonic sensor applications. Allows user to input tank dimensions in order to calibrate the indicator.

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#### Calibration Restore

Restores original factory calibration

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#### Menu / Keypad

Makes instrument more "User friendly". All functions can be accessed via the keypad and does not require the user to open the enclosure and use dip switches to format.

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#### Password Protection

Keypad and menu items have independent password protection to prevent unauthorized operation.

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#### Backlit Display

Makes digital displays easy to read in low light conditions.

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#### Dual Line Display

Indicator can simultaneously display 2 separate scales. At a glance, the operator can visually compare or take readings from each scale without having to access the keyboard.

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#### Automatic Channel Scanning

On multi-channel indicators, this feature allows the indicator to scan each scale every 3 seconds. This accommodates operators that are either unfamiliar with the instrument, or don't want to enter the chemical environment by viewing through a window.

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#### Ultrasonic Sensor Capability

Indicator is compatible with our ultrasonic level sensors.

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### POWER

#### 110 / 240 VAC

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#### 24 to 36 VDC

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#### (2) C Cell Batteries

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#### None Required

Operates hydraulically

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### CERTIFICATION & RATINGS

#### CE Approval

Assures that instrumentation meets two international standards for electronic instrumentation: 1) Electrical Safety & 2) Immunity to electromagnetic and radio frequency interference. Extremely important when dealing with hazardous chemicals such as chlorine gas.

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#### UL Listed Enclosure

Underwriter Laboratories is the standard in the USA for electrical safety. Compliance assures an electrically safe and compatible device.

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#### NEMA 4X / IP67

Assures that instrument enclosures are properly designed to 1) Resist corrosion and 2) prevent intrusion of moisture & gases within the enclosure.

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√ = Standard    Opt. = Optional    -- = Not Available