



A member of the
Avery Weigh-Tronix Group

350 I.S./355 I.S.



Intrinsically Safe
Weight-Based Indicators



Intrinsically Safe Indicators

The Model 350 I.S. and Model 355 I.S. are designed to be intrinsically safe in hazardous environments and meet global standards in metrology and electrical safety with precision weighing. Smart features such as quick calibration, fast update rate, and process control configuration offer value-added flexibility. They are designed for use in multi-level applications and provide operator access for monitoring and controlling actions based on weight values.

Global Approvals for Safety/Emissions, and Legal for Trade Accuracy.

For classification ratings, and divisions of our intrinsically safe instruments, please see Control Documents e.g. Safety/Emissions, at www.gse-inc.com. The Model 350 I.S., and Model 355 I.S. Indicators are listed by the following agencies: FM Global (US, Canada), ATEX (EU), and CE (EU).



The Model 350 I.S. Indicator is ideal for applications where only the weighing event occurs. Where a keypad is required, the Model 355 I.S. Indicator is the perfect choice.

We offer a choice of display types to suit your application. When an indicator is located outside or in direct sunlight, the LCD (Liquid Crystal Display) Backlit Display maintains excellent readability. Installation locations with low or no light will benefit with indicator models that have the bright, crisp LED (Light Emitting Diode) Display.

These indicators can be powered by a battery pack in the hazardous area for applications where access to main power is an issue. The battery module is mounted on the indicator swivel bracket and the indicator has an annunciator to warn when the battery requires a recharge. Battery recharging must occur in a safe area. There is also a sleep mode feature for extended battery life. For applications where the indicators are providing data or controlling actions, a continuous power source is an available solution.

Data communications and set point interfacing is performed in the safe area. The Model 350 I.S., and Model 355 I.S. Indicators communicate via the optional fiber optic interface.

To complement our Intrinsically Safe instruments, we offer a complete line of Bench Platforms, Floor Scales and Tank Weighing Assemblies.

APPLICATIONS

- Fertilizer Processing and Loading
- Ink Manufacturing and Blending
- Gaseous or Liquid Fueling Stations
- Chemical Development and Mixing
- Portable Oil Drum Weighing
- Paint Processing and Filling

Hazardous Area Communication

FEATURES

Model 350 I.S./355 I.S. (Hazardous Area Indicator)

- Display Choices: LCD, LCD Backlit, or LED
- Up to 200 hours continuous use with battery module
- Real time clock with battery backed time and date
- Two (2) communication ports
- Stainless Steel IP66/NEMA 4X enclosure
- Power up to four (4) 350 Ω load cells
- Update Flash firmware enhancements with GSE Reflash utility
- AC Power Module can be located in safe or hazardous area
- START, STOP, TARGET keys for Setpoint Control functions (355 IS)
- Two (2) Intrinsically Safe inputs for remote key functions
- 8 V Excitation Module increases signal input level



Model 355 I.S. Indicator
with LCD Display,
and Battery Module

Model 350 I.S. Indicator
with LED Display



**Safe Area Hub:
Model 355 Indicator**

Safe Area Communication

To complement our intrinsically safe indicator, a Safe Area Hub is available. An optional Fiber Optic Communication Kit is installed in the Intrinsically Safe Indicator and the Safe Area Hub, a standard Model 350/355 Indicator. Via this fiber optic connection, the Safe Area Hub will echo the intrinsically safe indicator's display weight/data, control setpoint contacts, analog output levels, and communications to other safe area devices. The Safe Area Hub can be configured to remotely control the intrinsically safe instrument or function only as a remote display.

Fiber optic cable available in plastic core fiber or hard clad silica (HCS).

OPTIONS

Model 350/355 (Safe Area Hub)

- RS485 Module: RS232 comm port 1 (not compatible with 20 mA module) isolated, half or full duplex, distance 4000 ft, 9600 baud max
- 20 mA Module: RS232 comm port 1 (not compatible with RS485 module) isolated, tx-active or passive, rx-passive only, 9600 baud max., 12 VDC, 1000 ft loop
- RS232 Fiber Optic Converter: 9 Pin Adapter, 262.5 ft (80m) transfer distance. Bidirectional communication between RS232 device safe area and fiber optic in hazard area
- Fiber Optic Communication Kit
- Battery Charger: Charges in 3.5 hrs, Universal AC Input 85-265 VAC, 50/60 Hz
- Scaleable Analog Output Module: 0-10 mA, 4-20 mA, 0-10 VDC
- Output Relay Module: 3 N.O. outputs, 20-240 VAC @ 1A or 5-60 VDC @ 2A, optically isolated

Power Options

AC Power Supply

- Stainless steel enclosure
- Universal mounting bracket
- 13 ft (4 m) power cord
- 90–250 VAC input 50/60 Hz
- Powers up to 2 Indicators (restrictions apply)



Power Extension Cable

- Mounts AC/DC Power Supply remotely from indicator
- 25 ft to 50 ft length (7.62 m to 15.24 m length)



Battery Module

- Stainless steel enclosure
- Mounts to Indicator swivel bracket
- 200 hr continuous use with LCD Display + 1 loadcell
- 100 hr continuous use with LED + 1 loadcell
- Battery recharge cycle is 3.5 hours with fully discharged battery

Specifications: Model 350 I.S./355 I.S. Indicators

PERFORMANCE	
Full Scale (F.S.)	Selectable to 999,999
Resolution	20 Bit A/D Converter, 100,000d Displayed and 1,000,000d Internal
A/D Conversion	60 Hz
Zero Track Aperture	Off to 10.0d
Operating Temperature	-10 °C to 40 °C
Units of Measure	lb, kg, oz, g, lb-oz
ELECTRICAL	
Power Requirement	Rechargeable Battery or AC Power Supply
Excitation Voltage	5 VDC or Optional 8 VDC
Excitation Current	57 mA max. (5V excitation) or 91 mA max. (8 V excitation)
F.S. Signal Input	0.1 mV/V min. – 10 mV/V max.
Signal Connection	4 Lead or 6 Lead
CONTROL	
Remote Input	2 Momentary Contacts to perform TARE, PRINT, or ZERO
ENCLOSURE	
Material	Stainless Steel NEMA 4/IP66 Design
Mounting	Swivel Bracket
Shipping Weight	7 lb (3 kg) (does not include AC or DC power module)
DISPLAY	
LED	6-Digit Red Display 0.8"H (22 mm)
LCD/LCD Backlit	6-Digit 1.0"H (25.4 mm)
Annunciators	lb, kg, Qty, Setpoint, 1, 2, 3, Center Zero, Motion, Gross, Net, Low Battery, 3rd Units
COMMUNICATION	
Comm 1	RS232 with Hardware Handshake (CTS/RTS)
Comm 2	TTL Port for Optional Fiber Optic Module
KEYPAD	
Model 350 I.S. Indicator	5-Key, Chemical Resistant, Elastomeric Rubber
Model 355 I.S. Indicator	22-Key, Full Numeral, Chemical Resistant, Elastomeric Rubber
AGENCIES	
	FM Global (US, Canada), ATEX (EU), CE (EU)



Avery Weigh-Tronix

Avery Weigh-Tronix - USA
 1000 Armstrong Drive
 Fairmont, MN 56031-1439 USA
 usinfo@awtxglobal.com
 Toll-Free: (800) 533-0456
 Phone: (507) 238-4461

Avery Weigh-Tronix - UK
 Foundry Lane, Smethwick
 West Midlands B66 2LP UK
 info@awtxglobal.com
 Phone: +44 (0) 121 568 1660
 Fax: +44 (0) 121 697 5660



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www.gse-inc.com
 for your nearest
 GSE Distributor



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