

# FAIRBANKS®

## S C A L E S



## 2800 SERIES

INTRINSICALLY SAFE INSTRUMENT WITH INTALOGIX®

Rugged, economical instruments designed to handle a variety of hazardous applications.

# 2800 SERIES

## INTRINSICALLY SAFE INSTRUMENT WITH INTALOGIX® TECHNOLOGY

The 2800 delivers proven functionality and protection for hazardous environments!

Fairbanks Scales has one of the most extensive weighing instrumentation lines in the world. Our 2800 Series Instrument combines the digital advantages of Fairbanks exclusive Intalogix Technology with a state-of-the-art, intrinsically safe design to achieve ultimate weighing performance in a variety of hazardous environments.

### 2800 SERIES INSTRUMENT: INNOVATIVE, SAFE, TIME-TESTED

Since 2001, the Fairbanks 2800 Instrument has improved customer weighing efficiency and operational safety. The features and benefits of this exciting, intrinsically safe product are remarkable. Take a look:

- The fastest and easiest calibration system on today's market. There is no need to drain tanks or hoppers or hang test weights when replacing a load cell. Simply install the cell and enter its output specifications into the 2800. Downtime is virtually eliminated!
- Features weight to gallon conversion.
- The 2800 is equipped with dual displays — a seven segment liquid crystal display (LCD) for communicating weight data; and a secondary 16 character alphanumeric LCD for operator prompts and messages.
- Programmable Zero Band Error helps eliminate the possibility of an operator unintentionally masking an error or "zeroing" the error off.
- Up to eight setpoints (relays) can be enabled using the 2800's Setpoint Accessory Box. Four modes of setpoint operation are standard on the instrument: setpoint mode, check weigh mode, batch mode and auto batch mode.
- Relay control buttons are located on the front of the instrument in a large, bright yellow, easy-to-read design.

- The 2800 is also front panel programmable. Target weights are quick and easy to change as your processes change throughout the day.
- Peak Hold function allows the greatest net weight value to be held in memory until the Clear key is pressed.
- Features a passive, smart, high resolution 4 to 20 mA analog output with resolution of up to 65536 (16 bit).



*Fairbanks' intrinsically safe 2800 Series Instrument is designed to perform with virtually any scale system. It is perfect for numerous chemical and food processing applications such as manual batching, auto batching, setpoint and PLC interfacing via 4 to 20mA.*

### WHY YOU NEED A 2800 SERIES INSTRUMENT

Let's face it, bad things happen to good people. Because we live in an imperfect world, load cells are finite devices with limited life cycles and they do fail. When load cells fail, they cause major errors that cost your business time (downtime), money (lost production) and possibly reputation damage (degraded product quality or incorrect product manufacturing). With the 2800 Series, these issues are virtually eliminated. The 2800 notifies the operator immediately when serious problems occur and helps the technician quickly locate, diagnose and correct the problem.

### LOOKING FOR PEACE OF MIND IN A HAZARDOUS WORLD?

Fairbanks Scales pioneered intrinsically safe scale equipment to provide a safe alternative for weighing operations that, due to their nature, are at higher risk for fire or explosion. Fairbanks' flagship instrument for IS applications, the 2800 Series, increases the safety, accuracy

and efficiency of potentially hazardous weighing operations and is NTEP approved for commercial weighing. Factory Mutual engineering and research has also approved the 2800 for use in hazardous areas. For information regarding FM approvals contact your Fairbanks representative.





## 2800 SERIES PRODUCT FAMILY MEETS INDUSTRIAL SAFETY NEEDS

Fairbanks has made it easy to create the perfect intrinsically safe environment with the 2800 Series Instrument and one or more of the 2800's low-cost accessories.

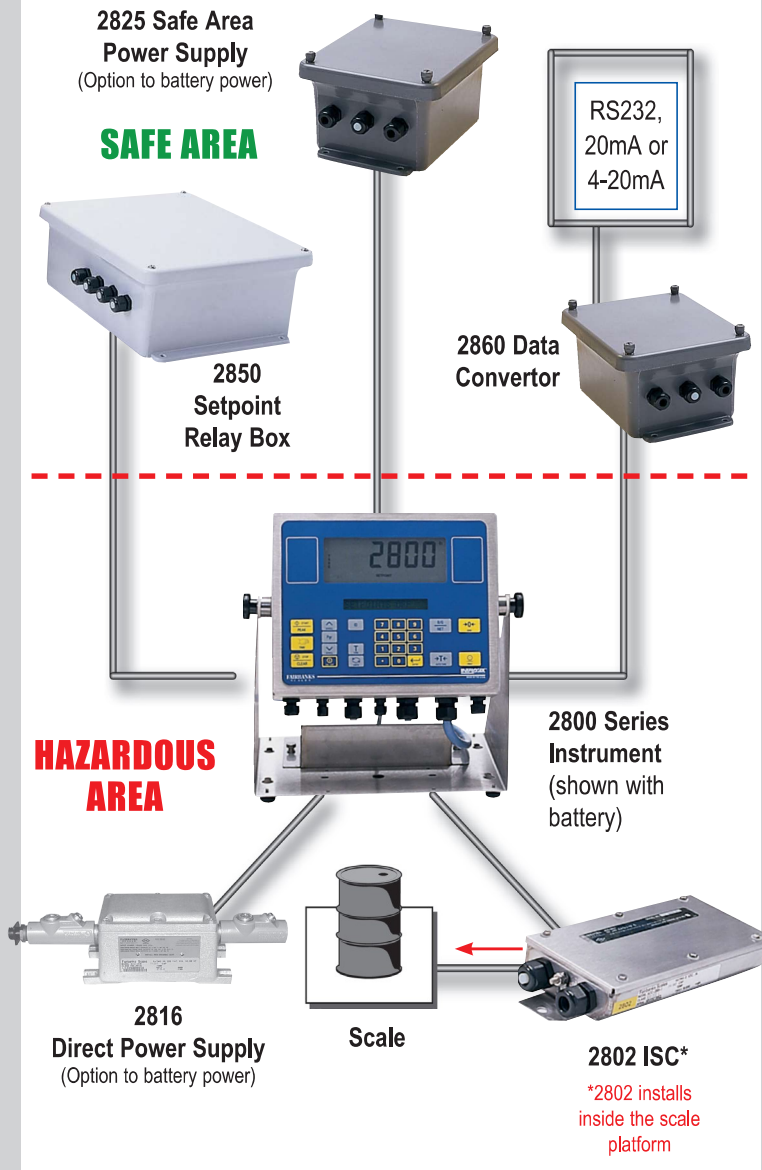
### 2860 DATA CONVERTER

The 2860 is a safe area, fiber optic converter box. This accessory receives fiber optic communication from the 2800 via 5806 fiber optic cable. It converts the data to RS232, 20 mA, or Smart 4 to 20 mA for communication with printers, PCs and other technologies. The 2860 can be located up to 200 feet away from the 2800 Instrument.

### 2825 SAFE AREA POWER SUPPLY

When interfaced with the 2800, the 2825 provides a safe area AC power source that eliminates the need for battery power. Contact your Fairbanks representative for more information regarding Factory Mutual approvals.

## 2800 Instrument System Schematic



## 2802 INTRINSICALLY SAFE CONTROLLER

Fairbanks' 2802 is a digital load cell interface box that converts a standard analog load cell signal to a digital signal. Each ISC controls up to four load cells.

### 2850 RELAY CONTROL BOX

The 2850 accessory is a safe area Setpoint Relay Box. It holds eight type "C" relays (included with accessory) and connects to the 2800 instrument via 5806 fiber optic cable. The 2850 offers four modes of setpoint operation.

Relay specifications:

24 VDC; 1 CA @ 28 VDC,  
120 VAC, 1/3 HP @ 120 VAC;  
240 VAC

### 2880 ANALOG LOAD CELL INTERFACE

The 2880 plugs inside the 2800 Instrument and allows up to 16 (1,000 ohm) analog load cells to be interfaced. The user can replace virtually any other intrinsically safe instrument, even in analog applications.

### 2816 DIRECT POWER SUPPLY

Provides intrinsically safe power in hazardous areas. The 2816 can power up to two 2800 Instruments and eliminates the need for batteries.

### What is intrinsic safety?

*Intrinsic safety is a design technique applied to electrical equipment and wiring for hazardous locations. The technique is based on limiting energy, electrical and thermal, to a level below that required to ignite a specific hazardous atmospheric mixture.*

### How is intrinsic safety defined?

*Intrinsically safe equipment and wiring shall not be capable of releasing sufficient electrical or thermal energy under normal or abnormal conditions to cause ignition of a flammable or combustible atmospheric mixture in its most easily ignitable concentration.*

### Who verifies intrinsic safety?

*Fairbanks Scales weighing equipment is tested and certified for intrinsic safety by the independent third-party agency FM Global.*

# 2800 SERIES

## INTRINSICALLY SAFE INSTRUMENT WITH INTALOGIX® TECHNOLOGY

Weighing Solutions for the World Since 1830

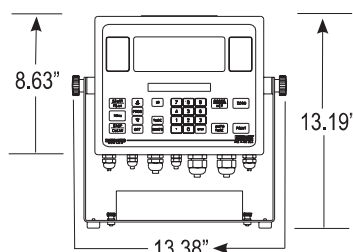
Fairbanks.com

### SPECIFICATIONS

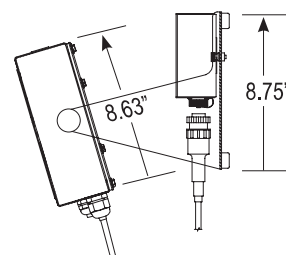
Display resolution . . . . .	10,000 divisions for commercial 30,000 divisions for non-commercial
Units . . . . .	lb, oz, g, kg, ton, lb-oz, weight-to-gallon conversion (field programmable)
Auto zero tracking . . . . .	Programmable
Keypad . . . . .	Full numeric with tactile feedback
Pushbutton zero range . . . . .	2% or 100%
Pushbutton keys . . . . .	Tare, auto tare, zero, print, gross/net mode, units selection, enter, program, scroll, start, trim, I.D. (six characters)
Balance detector . . . . .	Programmable
Weight display . . . . .	1.25" high, seven segment, six digit, liquid crystal display (five digits with minus sign)
Secondary display . . . . .	0.38" x 0.191", 16 character liquid crystal display
Display update rate . . . . .	Programmable 0.1 to 0.8 seconds
Graduation size . . . . .	0.0002 to 50 in increments of 1, 2 and 5
Load cells . . . . .	Up to 16 load cells
Enclosure . . . . .	304 stainless steel, NEMA 4X
Data protection . . . . .	100% retention of all stored data by EEPROM
Over/Accept/Under . . . . .	Annunciator displays within one division size of predetermined weight range
Humidity . . . . .	0 to 100%, suitable for washdown
Recharge warning . . . . .	Displays when battery is within 80-90% of total discharge
Low battery warning . . . . .	Displays when instrument will no longer operate without safe area recharging (95-98% discharge)
Approvals . . . . .	NTEP CC# 01-009, Factory Mutual approval for the following: <b>2800 with analog load cell interface and battery power</b> Groups A, B, C, D, E, F & G Class I, II & III Division 1 & 2 <b>2800 with Intalogix load cell interface (2802 ISC) and battery power</b> Groups A, B, C, D, E, F & G Class I, II & III Division 2

### DIMENSIONS

#### 2800 DESKTOP



#### 2800 WALL MOUNT



**INTALOGIX**  
TECHNOLOGY

### DISCOVER THE POWER OF FAIRBANKS EXCLUSIVE INTALOGIX® TECHNOLOGY

What makes the 2800 Series Instrument so unique among Fairbanks products is the combination of its intrinsically safe design, Factory Mutual rating and Intalogix Technology capabilities. Intalogix, Fairbanks' innovative digital technology for load cell communication, offers superior load cell diagnostics, quick and easy mV calibration, error messages and programmable zero shift.



Your Fairbanks Scales Authorized Representative is:

Call toll-free for the representative nearest you:

**(800) 451-4107**

Call between 8:00 a.m. – 5:00 p.m. Central Time

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