

# Weigh II™

A flexible four vessel weight indicator for inventory monitoring or single vessel in-process weighing applications.

TECHNICAL SPECIFICATIONS



# **FEATURES & BENEFITS**

### One to Four Vessel Indicator

Multi-vessel indicator for local display.

### Sentry<sup>™</sup> DSP Filter

Separates mixer and plant vibrations from weight changes. This provides accurate and reliable weight readings.

#### **Modular Design**

Configurable for number of sensors, relays, current loops, and PLC interfaces.

### **High-Resolution Weight Conversion**

Up to 21-bit resolution for high accuracy needs.

## Backlit LCD Display and Sealed Keyboard

Easy access to data and operating parameters to match the unit to your measuring situation.

### **NEMA-4X Enclosure**

In fiberglass reinforced polyester (FRP) or optional stainless steel; offers the right protection for your environment.

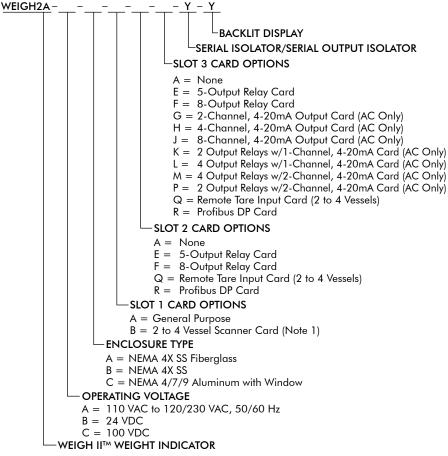
#### **Built-in Serial Port**

Versatile interfacing for data collection, servicing and building large multi-vessel communications systems.

The Weigh II™ is a multi-vessel indicator for local display. The electronics acquire input signals from half or full bridge strain gage transducers through a high resolution (up to 21-bits) analog to digital converter. Resolution and gain are adjustable for optimal system performance. Weight is displayed at the indicator and data can be serially polled from a master device. Analog and digital outputs can be generated from the inputs to the Weigh II to provide auxiliary controls. The unit includes setpoint preact, digital interfaces and Kistler-Morse Sentry™ DSP filter which provides stable, accurate readings under a variety of mixing conditions or plant vibrations.

Kistler-Morse Weigh II is also available with the Profibus DP option, which eliminates the use of costly and time consuming third party bridging techniques. Weigh II's modular design provides easy system configuration, calibration and expansion for meeting future requirements.

## **HOW TO ORDER**



**Note 1.** The Weigh II<sup>™</sup> Weight Indicator can be used with all half bridge or all full bridge sensors ONLY. Sensor types cannot be mixed. Consult factory for outputs on all 21 VDC or 100 VAC units.

# **SPECIFICATIONS**

### **FUNCTIONAL**

FUNCTIONAL	
Voltage - Operating Range	DC Power: 24 V $\pm$ 10% AC Power: 100 VAC $\pm$ 10%, 50/60 Hz 56 VA, 115 VAC $\pm$ 10% 50/60 Hz 56 VA, 230 VAC 10% 50/60 Hz 56 VA
Operating Temperature	-5° to 122° F (-20° C to 50° C)
PERFORMANCE	
Transducer/Sensor Input	All KM half-bridge, full-bridge foil gage
Excitation (per system)	Programmable between 5 and 12.5 volts @ 232mA
Resolution (per system)	Selectable 16 bits (1 part in 65,536) to 21 bits (1 part in 2,097,152) in 1 bit increments
Conversion Speed	Single Vessel System: 16 bits-25ms, 19 bits-125ms, 21 bits- 512ms
Multi-Vessel Scanner Card (per channel)	Optional: 16 bits- 76ms, 19 bits- 376ms, 21 bits- 1.535 seconds
Span (per system)	Programmable between $\pm$ 3.0V @ 12V excitation, Gain = 1 $\pm$ 19.5mV @ 10V excitation, Gain = 128
Temperature Stability	Zero 1 ppm/° C; span 5 ppm/° C
Common Mode Rejection	92db min @ DC; 150db min @ 60 Hz
Normal Mode Rejection	100db min @ 60 Hz
Serial Communication Built-In	RS-422, RS-485 (optical isolation standard), TTL, 300, 1200, 2400, 4800, 9600 or 19.2K baud for multi-drop single cable connection. RS-232 compatible for single point connection.
Option Cards	
Scanner Option	For up to 4 vessel expansion; must be installed in first option slot
PLC Interface Option	Profibus-DP Slave
Multi-Vessel Remote Tare	
Relay Output Option	Form "C" SPDT, programmable, 10 A 110 VAC, 8 A 230 VAC non-inductive, 10 A 30 VDC. Available as plug in modules of 5 and 8 relays each
Current Output (4-20/0-20) mA Option	For AC unit only; isolated 600 ohms maximum with internal supply or externally powered up to 1000 ohms with a 24 VDC supply, 12-bit resolution; available as plug in modules of 1, 2, 4 and 8 outputs with common isolation; must be installed in third option slot
Combi-Cards	One Combi-card per unit; combinations are 2 relays, 1 current; 4 relays, 1 current; 2 relays, 2 currents or 4 relays, 2 currents
PHYSICAL	
Display	Large, back lit alphanumeric liquid crystal, two lines of 16 characters, 0.38" (9.66 mm) high user programmable IDs, selectable bar graph or engineering units format
Programming/Parameter Entry	Integral 24-key sealed membrane tactile keypad
Setup	Menu-driven prompts
Memory	Non-volatile RAM, common isolation parameter storage
Enclosure	NEMA 4X fiberglass reinforced polyester (FRP); NEMA 4X SS
Humidity	1% to 95% (non-condensing)
Storage	-40° to 140° F (-40° to 60° C)
Dimensions	FRP: 12.0" x 10.75" x 5.62" (305 mm x 273 mm x 143 mm)
Shipping Weight	20 lbs (9 kg)



