



# STXplus™ Signal Processor

A stand-alone blind transmitter for in-process or bulk inventory weighing applications, where a display is not required.

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**TECHNICAL SPECIFICATIONS**



## FEATURES AND BENEFITS

### Blind Transmitter

Simple yet powerful device with simultaneous serial output and analog output to communicate effectively with host control systems.

### Sentry™ DSP Filter

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

### High Resolution Weight Conversions

Selectable resolution up to 23 bits to optimize speed with system performance requirements.

### Built-In Serial Port

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

### Operational Enclosures

NEMA 4X fiberglass reinforced polyester (FRP) or stainless steel.

### Output

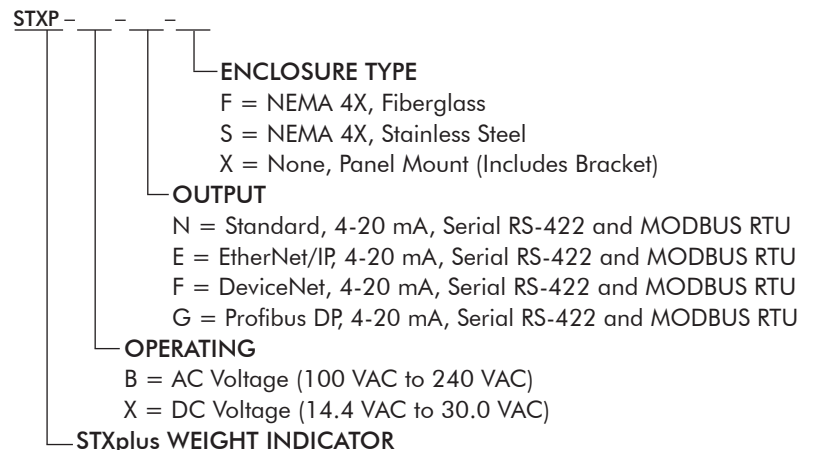
Standard digital output and standard current output.

The STXplus™ Signal Processor is a single vessel 4-channel instrument that employs a 23-bit analog-to-digital (A/D) converter to translate input from strain gage sensors/transducers into weight indication. The STXplus Signal Processor can simultaneously output via two 5A output relays, a current output, and serial communication ports.

The STXplus can receive analog signals from either half-bridge sensors/transducers like the Kistler-Morse® L-Cell™, Microcell™, Load Stand II™, or Load Disc II, or from standard full-bridge sensors/transducers.

The unit includes the Kistler-Morse® Sentry™ DSP filter, which provides stable, accurate readings under a variety of mixing conditions or plant vibrations. Sentry digitally separates the vessel weight changes from the vibrations and dynamic conditions often experienced on vessels with mixers. This provides stable and accurate weight readings. Its flexibility allows the user to optimize system performance so it will not be affected by sudden weight changes like other filter systems.

## HOW TO ORDER



# SPECIFICATIONS

## FUNCTIONAL

Voltage - Operating Range	DC Power: 15 to 30 VDC at 300 mA AC Power: 100 to 240 VAC, 20 W maximum, 47 Hz - 63 Hz
Operating Temperature with Power Supply	14° to 122° F (-10° C to 50° C)

## PERFORMANCE

Sensor/Transducer Input	
Excitation	Programmable: 10 V and 12 V at 114 mA
Resolution	Selectable 16 bit (1 part in 65,536) to 23 bit (1 part in 8,388,607) in 1 bit increments
Conversion Speed	16 ms at 16 bit - 19 bit, 30 ms at 20 bit, 59 ms at 21 bit, 120 ms at 22 bit, 240 ms at 23 bit
Span	Programmable between $\pm 2$ V at 12 V excitation and $\pm 15.6$ mV at 10 V excitation
Temperature Stability	Zero 10 ppm/° C; span 80 ppm/° C
Output and Communication	
Built-In Serial Communication	RS-422/RS-485 switchable. Baud rates of 9600, 19.2k, 38.4k and 115.2k for multi-drop single cable connection
RS-485 Modbus RTU	115k baud rate
Analog Output	Format: 0 - 20 mA, 4 - 20 mA, 20 - 0 mA or 20 - 4 mA Resolution: 16 bit (1 part in 65,536) Isolation: 500 VAC Maximum Load: 600 ohms with internal loop supply; up to 2.4 ohms with external loop supply

## PHYSICAL

Storage Temperature	-40° F to 158° F (-40° C to 70° C)
Humidity	1% to 95% (non-condensing)

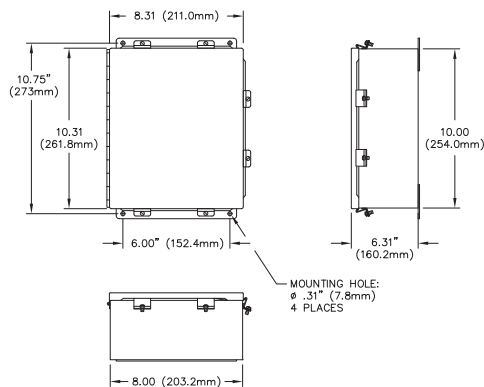
## OPTIONS

Enclosures	Fiberglass: NEMA 4X (IP66) Stainless Steel: NEMA 4X (IP66)
PLC Interfaces	DeviceNet, Profibus DP, Ethernet I/P

## APPROVALS

	CE approved with optional SS enclosure
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NEMA-4X (SS) Enclosure  
Installation Mounting Dimensions



NEMA-4X (Fiberglass) Enclosure  
Installation Mounting Dimensions

