

SPECIFICATION SUMMARY SHEET

T23 Selective Ion (pION) TRANSMITTER

MEASUREMENT RANGE

Concentration range 1 to 999.00 of the Molar calibration range or 0.1 to 9,999 ppm (5 decades). All ranges are a function of the electrode's output.

OUTPUT

4-20 mA or 20-4 mA, linear and expandable.
Up to a maximum of 3 outputs.

POWER REQUIREMENTS (with zero loop impedance)

Recommended	24 vdc
Maximum	50 vdc
Minimum	13.5 vdc

MAXIMUM LOOP IMPEDANCE (@ 24 vdc)

525 ohms for 4-20 mA compliance on primary (channel 1) output; approximately 800 ohms on secondary outputs.

RELAY MODULE

2 each Form C, SPDT, dry contacts, 50/60 hz.
5 amps @ 24vdc
3 amp @ 24vdc inductive
Single channel T23: Both relays assigned to channel.
Dual Channel T23: One relay assigned to the primary channel, one relay assigned to the secondary channel
Relays can be field configurable as high or low relays. The deadband is fully adjustable.

DISPLAY

Menu driven, 32 character alphanumeric, Supertwist LCD.
The main menu simultaneously displays (1) process identity (2)process value (and engineering units), (3)percent output, (4)temperature in °C or °F.

ENCLOSURE

NEMA 4X, weatherproof

SHIPPING WEIGHT

Standard T23: 2 lbs (0.91 kgs)

ACCURACY

+/- 0.10% of full scale

SENSITIVITY

+/- 1.0 mV

LINEARITY

+/- 0.05% of full scale

STABILITY

+/- 0.2% per year @ 0°C to 70°C

RESPONSE TIME

1 second to reach 90% of the change.

REPEATABILITY

+/- 1.0 mV

OPERATING TEMPERATURE

-4°F to +158°F (-20°C to +70°C)

TEMPERATURE COMPENSATION

Automatic, temperature compensation through customized Isopotential point algorithms.
Accuracy within +/-0.2°C over a 0°C-100°C span.

50/60 Hz NOISE REJECTION

Greater than 70 db

INPUT/OUTPUT ISOLATION

Maximum 300 volts between process input and any 4-20 mA output (single and multiple channel outputs). No isolation between inputs on multiple channel units.

CALIBRATION

Auto Buffer Calibration

Allows the definition of two buffer points, saved in memory, during the initial start-up. This will allow subsequent standardize and span buffer calibrations with only 2 keystrokes.

Back-to-Factory Calibration (Factory Restart)

With 2 keystrokes, allows the technician to return the transmitter to a reference point and to an ideal Nernstian slope for the specific response of the ion electrode.

Temperature Trim

Allows for compensation for any differences in RTDs by programming the offset into the transmitter.

Temperature Display

Temperature can be field configured to display in °C or °F.

Display Contrast

Fully adjustable for ambient lighting condition