

### NUS-710DU0TS

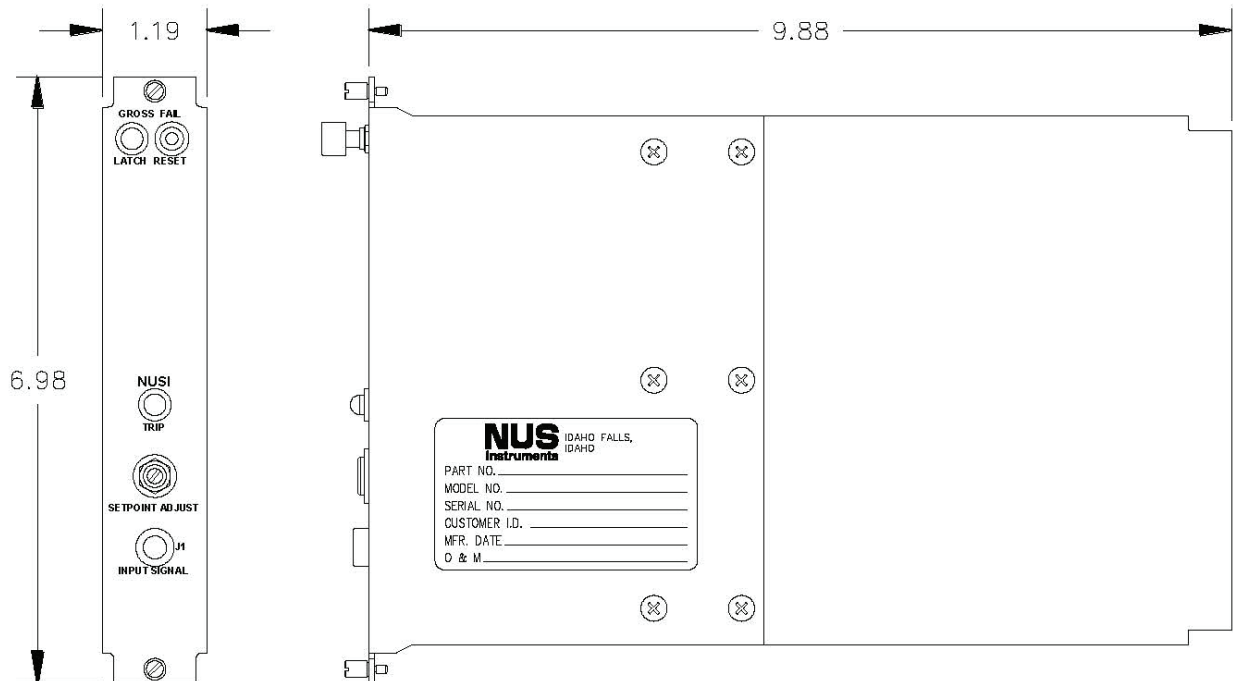
The NUS-710DU trip units are form, fit and function replacements for the corresponding trip units in the Emerson-Rosemount Model 710DU Trip/Calibration System.

The Slave Trip Unit uses the same circuit board as the Master (4 to 20 mA) Trip Unit. It does not include the input conditioning circuit, since its input from a Master Trip Unit is already 1 to 5 Vdc, and it does not include the analog output circuits.

Each Slave Trip Unit provides additional, independently-adjustable trip and gross failure alarm circuits for a Master Trip Unit. One Master Trip Unit can drive up to seven Slave Trip Units, thereby establishing as many as eight trip points (one for Master and seven for Slaves) for a single input signal.



NUS-710DU0TS



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## Slave Trip Unit

### SPECIFICATIONS

Input:	1 Vdc to 5 Vdc (from Master)
Output:	24 Vdc (nominal) for trip, gross failure, and calibration status
	12 Vdc (nominal) for trip status
Power Supply Voltage:	22 Vdc to 28 Vdc
Current Drain:	225 mA
Fuses	F1 & F2: 1.5 A, fast acting, 250 Vac, type 3AG, axial leads
Ambient Temperature:	60 °F to 90 °F (15.6 °C to 32.2 °C) (normal operation)
	To 160 °F (71.1 °C) (for 24 hours once per year)
	To 185 °F (85 °C) for 6 hours, then to 150 °F (65.6 °C) for 8 hours post-accident
Relative Humidity:	40% to 50% (normal operation)
	To 90% (for 24 hours once per year)
	To 90% (for 14 hours post-accident)
Radiation Limits:	10 <sup>5</sup> rad (air) TID gamma over 20 years (normal operation)
	2 x 10 <sup>5</sup> rad (air) TID gamma in 24 hours (accident)
Analog Output Accuracy:	±0.15% (60 °F to 90 °F)
	±0.35% / 100 °F (over 90 °F)
Trip Point Repeatability:	<u>Normal operation (temperature, humidity and radiation)</u> ±0.20%
	<u>Extended temperature and humidity (for 24 hours once per year)</u> ±0.35% / 100 °F over 90 °F at 90% RH
	<u>Accident temperature and humidity</u> ±0.60%
	<u>Accident radiation (&lt;= 8 x 10<sup>4</sup> rad TID)</u> ±0.6% with Master (4-20 mA) input ±5.0% with Master (RTD) input
	<u>Accident radiation (&gt; 8 x 10<sup>4</sup> to tested limit of 2.2 x 10<sup>5</sup> rad TID)</u> ±8.0% with Master (4-20 mA) input ±32.0% with Master (RTD) input
Connections:	The NUS-710DU trip units are designed to mount within an Emerson-Rosemount or Scientech Card File. The rear edge of each card includes a single-sided edge connector with gold-plated contacts. All electrical connections are made at screw-type terminations on the rear of the Card File connector.
Seismic Qualification:	Tested to a ZPA of 1.17 g OBE and 1.75 g SSE per IEEE 344-1975, as documented in NUS-A385QA, based on Rosemount report D8200037.

### HOW TO ORDER

Order NUSI model number NUS-710DU0TS.

#### CONTACT INFORMATION:

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