

SQR2000-750 Square Root Extractor

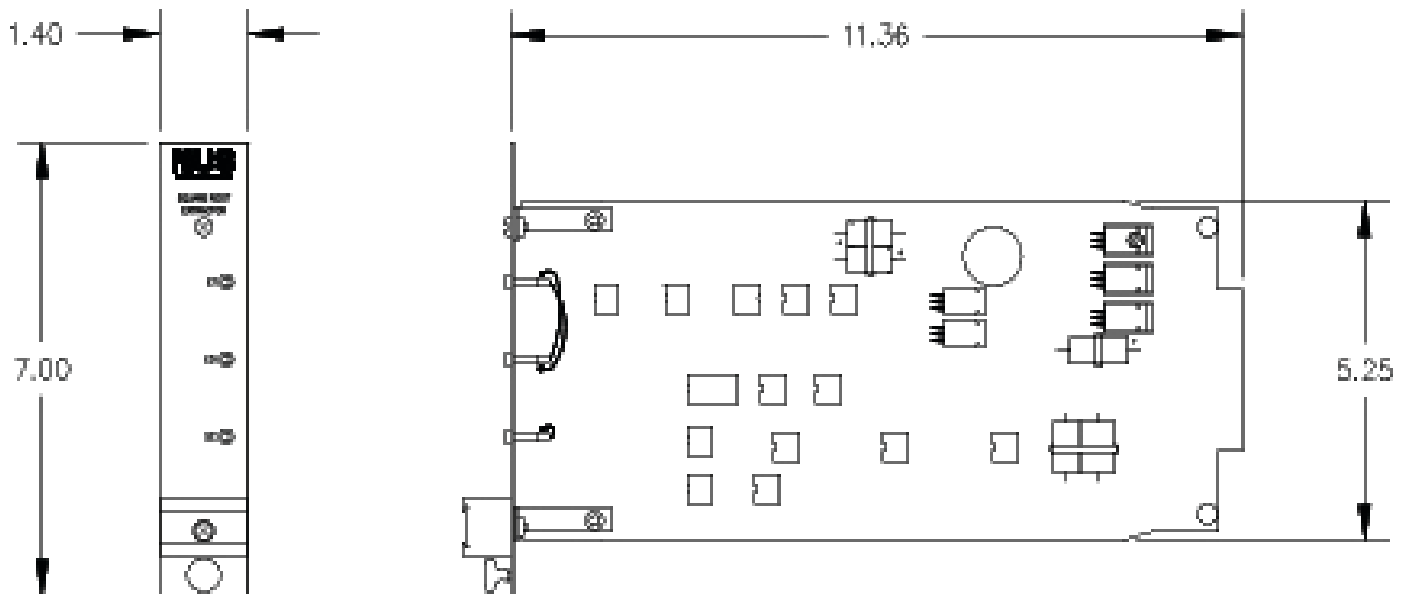
The SQR2000-750 Square Root Extractor replaces the obsolete Bailey Type 750 square root extractor while retaining the functions of the Bailey module, and is available in a Nuclear Qualified model.

The SQR2000-750 produces a 1 V to 5 Vdc output signal, which is proportional to the square root of a 1 V to 5 Vdc input signal. It is used to convert the signal from a differential pressure transmitter, which measures the pressure drop across an orifice, to a signal proportional to flow. The transfer characteristic is expressed by:
$$\% \text{ OUTPUT} = 10 \sqrt{\% \text{ INPUT}}$$

The SQR2000-750 is manufactured with a jumper-selectable low level cut-off feature, which is adjustable from 0% to 30% of output span. This feature is used to eliminate undesirable output signals at low input levels.



SQR2000-750



NUSI 2000 Series

Square Root Extractor

SPECIFICATIONS

Input Signal:	1 V to 5 Vdc. Input resistance exceeds 1 M Ω
	Low Level Cutoff: jumper selectable
	Cutoff level is adjustable from 0% to 30% of output span (1 V to 2.2 Vdc)
Output Signal:	1 V to 5 Vdc into 1500 Ω minimum
Accuracy:	At 24 Vdc and 80 °F: 0.1% of span for output between 10% and 100% of span
Dynamic Response:	3 db down, nominal 1.5 Hz, phase angle less than 100° (nominal)
Power Supply Voltage:	0.125 A nominal @ 24 V \pm 2 Vdc; 0.25 A fuse
Operating Influence:	Supply Voltage: 24 V \pm 2 Vdc (\pm 0.01%)
Ambient Temperature:	40 °F to 120 °F (5 °C to 49 °C) (normal operation)
	0 °F to 140 °F (–18 °C to 60 °C) (operative limits)
	0 °F to 120 °F (–18 °C to 49 °C) (storage)
EMI/RFI Protection:	EPRI Report TR-102323, Rev. 2
Seismic Qualification:	NUS Instruments Composite Required Response Spectra (RRS)
Dimensions:	1.4 in x 7 in x 11.5 in
Weight:	Rack-mounted: < 1 lb
Mounting:	Bailey Type 761 Rack Unit
Legend:	Legend plate holder is integral with the withdrawal handle

For more information please request a
Square Root Extractor Operation & Maintenance Manual.

CONTACT INFORMATION:

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