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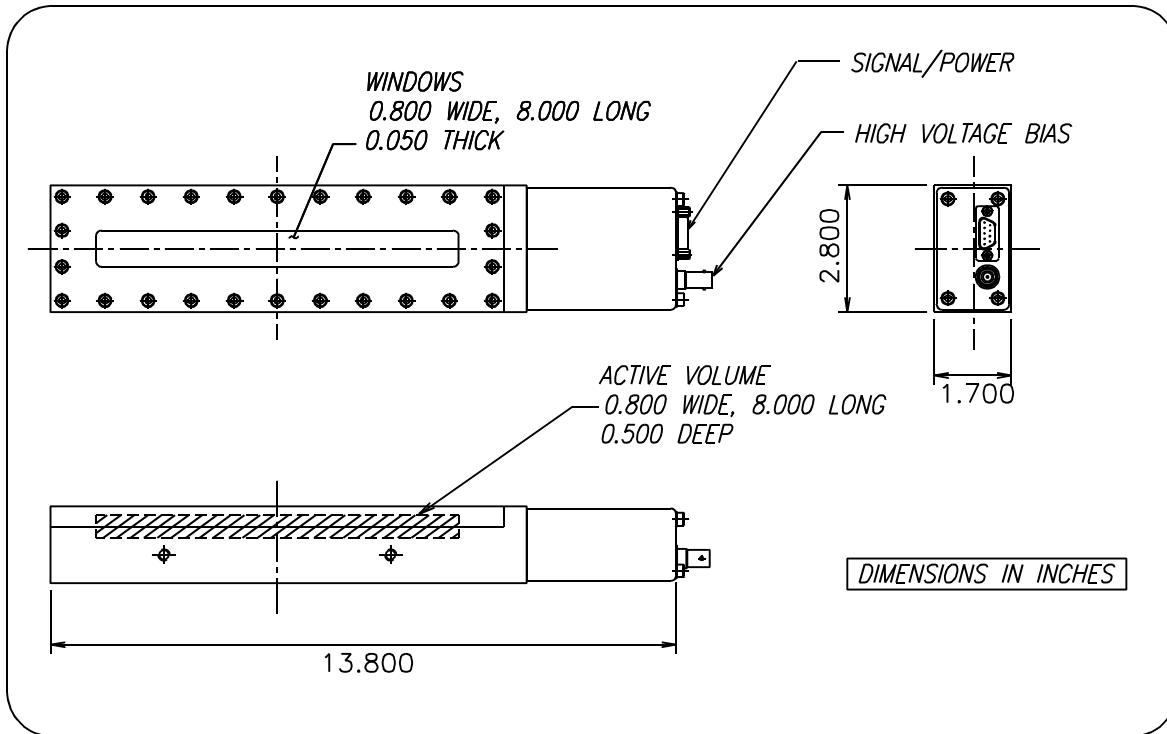
ORDELA MODEL 4220N NEUTRON BEAM MONITOR

DESCRIPTION

The ORDELA Model 4220N Neutron Beam Monitor is a two-anode counter designed for high transparency to neutrons of 0.025 eV energy. The gamma sensitivity has been reduced by using all-Aluminum construction and a quench gas of low cross-section for gamma radiation. No hydrogen bearing materials are used in the counter or quench gas. The complete Neutron Beam Monitor is packaged in a 7.1-cm-wide, 36.8-cm-long, and 4.3-cm-high unit. It includes a low-noise preamplifier and a high-voltage filtering circuit.

SPECIFICATIONS

DETECTION EFFICIENCY:	$10^{-4} \pm 10\%$ for a nominal neutron energy of 0.025 eV (0.18 nm wavelength)
COUNTER GAS:	$^3\text{He} + ^4\text{He} + \text{CF}_4$ at 760 torr
SENSITIVE AREA:	2.0 cm wide x 20.3 cm long
SENSITIVE DEPTH:	1.3 cm
WINDOW THICKNESS:	0.2 cm Aluminum
HIGH-VOLTAGE BIAS:	500 V
PREAMPLIFIER POWER:	$\pm 12 \text{ V @ } 15 \text{ mA}$
CONNECTORS:	One SHV connector for counter bias; one 9-pin sub-D for preamp power and signal output
PREAMPLIFIER:	Voltage sensitive, 20 to 80 mV output pulses in response to neutrons
STANDARD ACCESSORIES:	One low-noise preamplifier (ORDELA Model VS-03) and a high-voltage filter and distribution circuit are installed and interconnected at the factory



ORDELA MODEL 4220N OUTLINE AND DIMENSIONS

WARRANTY

ORDELA, Inc. warrants its products to be free from defects in materials and workmanship for 12 months after shipment. No other warranty is included. Specifically, no warranty of merchantability or fitness for a particular purpose is implied. ORDELA's liability under this warranty is limited to repairing or replacing the product at ORDELA's option. This warranty is void if the product is operated improperly, disassembled, or modified other than in the ORDELA laboratory.