

ORDELA MODEL IS-20

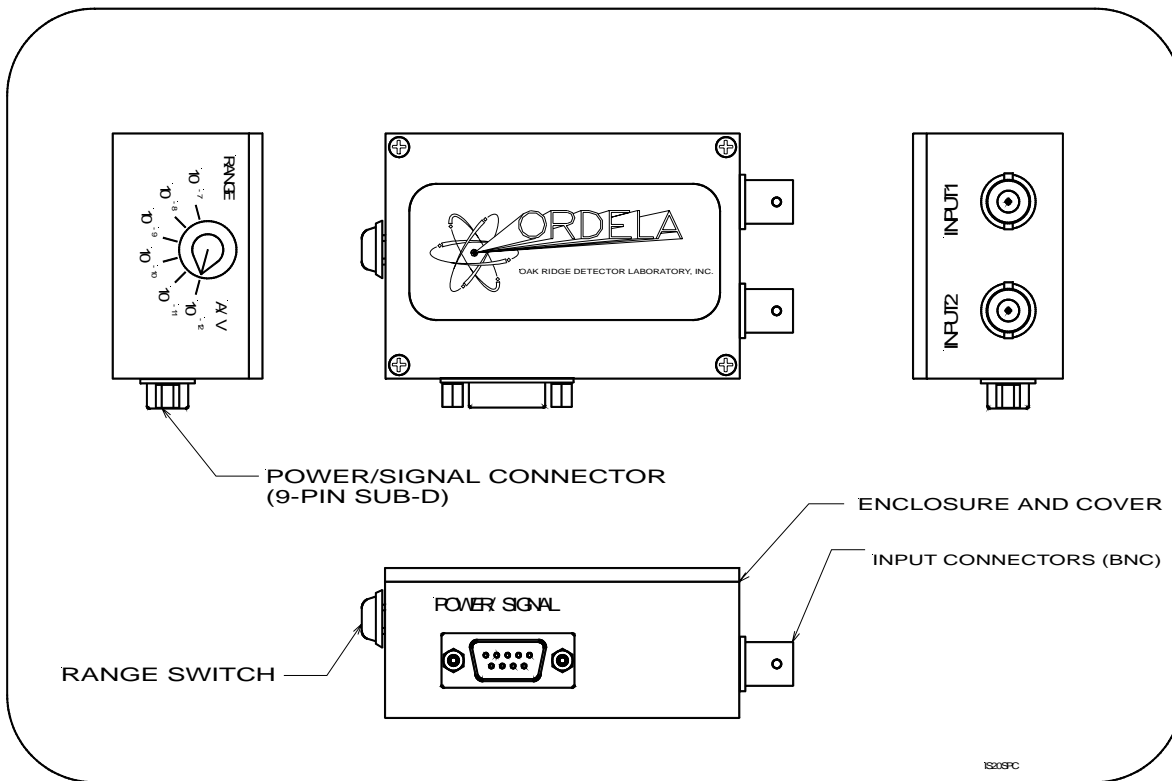
DUAL ELECTROMETER MODULE

DESCRIPTION

The ORDELA Model IS-20 is a dual-electrometer circuit designed for two independent and simultaneous, low-current measurements in the range 10^{-6} to 10^{-11} A. The circuit is housed in a 3.2-cm-wide, 7.5-cm-deep, and 5.2-cm-long aluminum enclosure containing all operational circuits, connectors and switches. The electrometers are identical, shunt-feedback operational amplifiers, having <10 fA input current at room temperature. The current sensitivity is selectable by a rotary switch over six decades ranging from 10^{-12} to 10^{-7} A/V. The full-scale output voltage is 10 V. Six voltage outputs (0, 1, 2, 3, 4, 5, and 6 V), are sent to the data processor to remotely indicate the sensitivity selected. (The zero position allows offset adjustments of the electrometer.) All power inputs (± 12 to 15 V and ground) and outputs (current, and range selection) are connected via a 9-pin, sub-D male connector at the front panel of the unit. Also on the front panel is the 7-position range switch. Two BNC connectors on the back panel of the unit connect to the inputs of the electrometers. The spacing and position of these connectors allows direct connection (without cables) to the ORDELA Model 4420X Position-Sensitive X-Ray Beam Monitor for minimum noise operation.

SPECIFICATIONS

SENSITIVITY:	Selectable over six decades 10^{-12} to 10^{-7} A/V, (i.e. 10^{-11} to 10^{-6} A full scale). A zero sensitivity position is provided for offset adjustment.
INPUT CURRENT:	<10 fA at room temperature
FULL SCALE OUTPUT:	10 V
STABILITY:	better than 0.1% of full scale on any range
POWER:	± 12 to 15 V @ 5 mA (Battery operation is recommended)
STANDARD ACCESSORY:	One 3-m-long power and signal cable
DIMENSIONS:	3.2 cm wide, 7.5 cm deep, 5.2 cm long
SHIPPING WEIGHT:	2 kg



ORDELA MODEL IS-20 DUAL ELECTROMETER MODULE OUTLINE DRAWING

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.