

ORDELA MODEL QS4000

BEAM MONITOR ELECTRONICS MODULE

DESCRIPTION

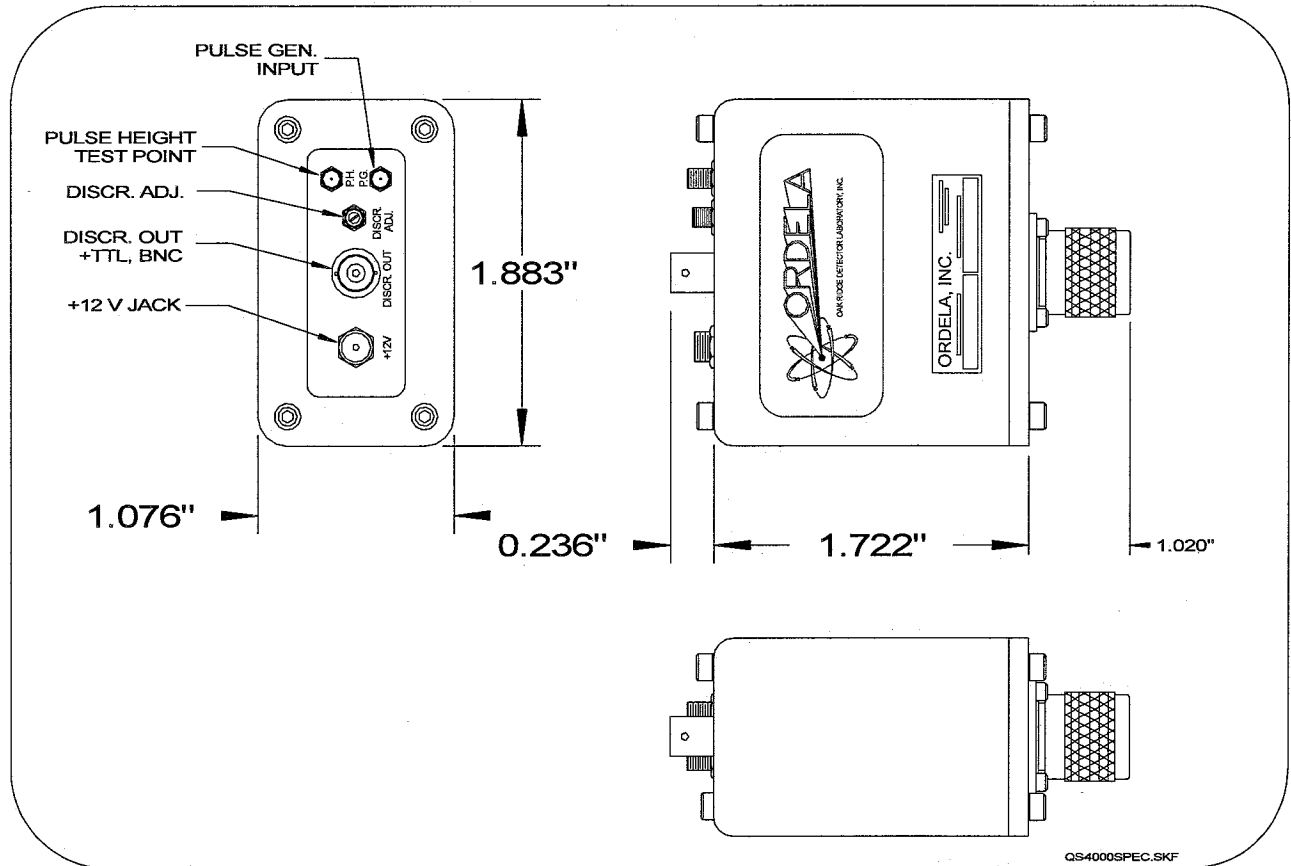
The ORDELA Model QS4000 is an electronics module designed and fabricated by ORDELA, Inc., to provide the pulse processing and biasing for ORDELA's line of neutron beam monitors. It is housed in a small aluminum enclosure (8.1 cm x 8.9 cm x 5.1 cm) and contains a pulse-shaping amplifier, an adjustable discriminator, and a high-voltage anode-bias supply. The unit operates from an external 12-V DC power supply. For operation from line power (110- or 220-V AC), suitable AC adapters are available from ORDELA, Inc.

The Model QS4000 plugs directly into the ORDELA beam monitors through a HN panel plug receptacle for mechanical and electrical connections. The front panel of the Model QS4000 features a TTL discriminator output, a lower-level discriminator control, a pulse-generator input, a pulse height test point, and a 12-V power input connector.

With these circuits, the Model QS4000 contains all functions necessary for pulse shaping, amplification, and background discrimination of the anode outputs from the ORDELA 4000 Series Beam Monitors.

SPECIFICATIONS

AMPLIFIER GAIN:	6 mV/fC
AMPLIFIER PULSE SHAPING:	20 ns, uni-polar, inverting
HIGH-VOLTAGE OUTPUT:	Internally adjustable, +300 to +1000 V, connected to the HN panel plug receptacle (Fig.1)
FRONT PANEL INPUTS:	+12 V power (Panel mount jack), Pulse Generator (SMA connector),
REAR PANEL INPUT:	0 to 150 fC charge pulses (HN panel plug receptacle)
OUTPUTS:	TTL pulses (BNC connector), Pulse Height (SMA connector)
CONTROLS:	Discriminator adjustment, 40 to 400 fC, (20-turn)
OPERATING TEMPERATURE:	0 to 50°C.
DIMENSIONS:	8.9 cm wide, 5.1 cm high, 8.1 cm long
SHIPPING WEIGHT:	2 kg



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.