



FEATURES

- *Compact, easy-to-use solution to your PMT interface requirements*
- *Low ripple, adjustable PMT bias supply*
- *Adjustable to 2000VDC*
- *Low-noise, charge sensitive, FET input preamplifier*
- *LCD display*
- *MCA interface for remote control and monitoring*

Description

The REXON Model RB-200 series Integrated PMT Base provides a simple solution for a reliable interface to photomultiplier tubes (PMT). The unit provides a high speed, low noise preamplifier, regulated, low ripple high voltage power supply and divider network is suitable for use in a wide variety of scintillation detector applications. The low noise design of the HV supply eliminates spurious counts often associated with lower quality units while eliminating the need for a costly external supply and associated cabling. The PMT socket is a standard 14 pin configuration and is available for both 8-stage and 10-stage dynode configurations.

The RB-200 features a convenient, sub-miniature LCD that displays the HV setting. The HV supply can be adjusted either locally or remotely. In addition, a logic level output signal indicates HV normal or fault status. The RB-200 features high stability and low ripple PMT bias supply necessary to meet the most demanding requirements.

The Integrated PMT Base provides an interface for use with a variety of MCA cards allowing remote control of the HV, monitoring of the HV supply status and low voltage supply direct from the MCA card.

Since the RB-200 provides all of the functionality necessary to properly bias the PMT, condition and drive the signal system integration becomes easy. Connection to the unit requires simply a low voltage power converter and a coax cable with a BNC connector. An internal jumper allows output impedance to be set for 50 ohms or 93 ohms to match the particular coax cable used.

The RB-200 is available in several versions. It can be supplied in either a 8-stage dynode or 10-stage dynode configuration. A preamplifier only version provides an SHV connector when external HV is used.

Both 120VAC/60Hz and 220VAC/50Hz power converters are available as well as a wide variety of international converters.

Consult our factory for other custom versions, configurations or gain selections.

Specifications

<i>Display:</i>	3.5 digit LCD
<i>Display resolution:</i>	1V
<i>Voltage range:</i>	0 to 2000VDC (positive)
<i>Operator controls:</i>	HV adjustment, remote/local selection (internal)
<i>Signal connector:</i>	BNC type
<i>Output impedance:</i>	50 Ω or 93 Ω
<i>HV output current:</i>	0 to 0.5mA
<i>HV ripple (, full load, P-P):</i>	<0.0005%
<i>HV stability:</i>	<0.005%/hr
<i>HV Temperature coefficient (typ.):</i>	<25ppm/ $^{\circ}$ C
<i>Operating temperature:</i>	-10 $^{\circ}$ to +50 $^{\circ}$ C (85% RH max.)
<i>Storage temperature:</i>	-25 $^{\circ}$ to +95 $^{\circ}$ C (95% RH max.)
<i>Power requirements:</i>	120VAC/60Hz to 12VDC @ 300mA power converter (220VAC/50Hz available) Direct from MCA (+12V)
<i>Dimensions (Dia. x H):</i>	2.2" x 5.4" (5.6 cm x 13.7 cm)
<i>Weight:</i>	0.8 lb (0.28 kg)

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