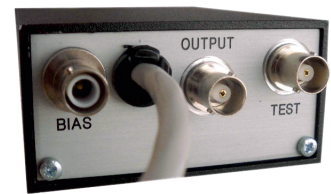


CB202A Charge sensitive preamplifier.

The preamplifier **CB202A** is fast charge sensitive preamplifier specially studied from Gas based detectors. The rise time is less 7 ns with 50 ohm termination. The module has bias input SHV connector (up to 3 KV) and protection circuit to avoid breakdown of the input of the preamplifier circuit. The module has only +/- 12 volt alimentation.



PERFORMANCE

Charge sensitivity	150 mV/pC
Decay time	50 us
Max. Noise*	200 e-
Noise/Input capacitance ratio:	<4 e-/pF
Integral nonlinearity:	0,1 % (without termination)
Output signal Rise Time	less then 7 ns.
Dynamic output range	+/- 6 V (without termination). +/-3V (with 50 Ohms termination).
Output offset	less then +/-3 mV
Output resistors:	50 Ohm
Test Capacitance:	3,3 pF (+/-3%).
Temperature stability:	+/- 100 ppm/C.

Note *: equivalent noise with 1us time constant integration is measured.

- INPUT** accepts positive or negative charge signal. BNC pin connector or SHV connector. (Specified in order)
- BIAS** voltage can be applied through SHV input connector. The serial resistance between input and bias connectors is 56 MegOhm.
- TEST** pulse input connector is BNC type connector. Test capacitance is 3,3 pF.
- POWER** input power through 3 meter screened cable.
- ENERGY** output negative or positive linear pulse. BNC connector.

POWER SUPPLY REQUIREMENTS:

The best solution is alimentation from a NIM standard power supply or special low noise linear power supplies.

Power supply pin out:

P. Voltage (V)	Current (mA)
+12	30,0
-12	24,6

Pin number	
4	+12 Volt
9	-12 Volt
1	Ground
2	Ground

Box dimensions: 111x80x40 mm

Cable length 3 m.