



- 250 Volt output
- Up to 25 Amps of current
- 200 Watt average output power
- Pulse widths to 2 ms
- IEEE-488.2 GPIB control

The AVR-10-B has the unique capability of generating very high power (200 Watts), wide 250 Volt pulses into load impedances as low as 10 Ohms (i.e., 25 Amps of current). This makes the AVR-10-B useful for driving arrays of laser diodes and other high-current loads.

The output amplitude can be varied between 0 and 250 Volts, and the output pulse width can be varied from 2 μ s to 2 ms. The maximum duty cycle is 3.2%, and the maximum pulse repetition frequency is 20 kHz. Output rise and fall times are 200 ns.

The AVR-10-B includes a complete computer control interface (see page 8 for details). This provides GPIB and RS-232 computer-control, as well as front panel keypad and adjust knob control of the output pulse parameters. A large backlit LCD displays the output amplitude, polarity, frequency, pulse width, and delay. To allow easy

integration into automated test systems, the programming command set is based on the SCPI standard, and LabView drivers are available at www.avtechpulse.com/labview.

A delay control and a sync output are provided for oscilloscope triggering purposes. The instrument can also be triggered externally using a TTL-level pulse. The AVR-10-B is protected from overload conditions (such as excessively high duty cycle or short circuited load) by an automatic control feature that limits the output power for as long as the overload condition persists.

The AVR-10-B is available with positive or negative outputs. A dual-polarity option is also available. The polarity must be specified when ordering, by adding the suffix "-P", "-N", or "-PN" to the model number. The output polarity of units with the -PN dual-polarity option can be controlled by the front-panel settings, or by computer commands.

Model ¹ :	AVR-10-B
Amplitude:	0 to 250 Volts, into load impedance $R_L = 10$ Ohms
Pulse width:	2 μ s to 2 ms
PRF:	Internal trigger: 2 Hz to 20 kHz, External trigger: 0 Hz to 20 kHz
Rise and fall time:	≤ 200 ns
Maximum Duty Cycle:	3.2%
Maximum Average Power:	200 Watts, average
Polarity ² :	Positive or negative or both (specify)
GPIB and RS-232 control ¹ :	Yes
LabView drivers:	Check www.avtechpulse.com/labview for availability and downloads
Propagation delay:	< 200 ns, Ext trig in to pulse out
Jitter:	± 100 ps $\pm 0.03\%$ of sync delay, Ext trig in to pulse out
Trigger required:	External trigger mode: +5 Volts, 50 ns to 5 μ s (TTL)
Variable sync delay:	0 to ± 2 ms, Sync out to pulse out
Sync output:	+3 Volts, 200 ns, will drive 50 Ohm loads
Gate input:	Synchronous or asynchronous, active high or low, switchable. Suppresses triggering when active.
Connectors:	Out, Trig, Sync, Gate (-B only): BNC
Dimensions: (H x W x D)	100 mm x 430 mm x 375 mm (3.9" x 17" x 14.8")
Power requirements:	120/240 Volts (switchable) 50 - 60 Hz
Other:	For chassis material, mounting and temperature range, see the AVR-3 Data sheet, page 42.

1) -B suffix indicates IEEE-488.2 GPIB and RS-232 control of amplitude, pulse width, PRF and delay (See page 8).
 2) Indicate desired polarity by suffixing model number with -P or -N (i.e. positive or negative) or -PN for dual polarity option.



AVR-10-B