



- Rise times as fast as 100 ps
- Amplitudes to 100V
- Pulse widths from 1 to 100 ns
- IEEE-488.2 GPIB Control
- Ethernet port for VXI-11.3 support

The AVI series provides high amplitude (up to 100 Volts) pulses with rise times as low as 100 ps.

The AVI-V-B family has rise times of 350 ps, pulse widths of 2 to 100 ns, variable amplitudes to 50V, and repetition frequencies up to 20 kHz.

The AVI-V-HV1A-B family is similar, with faster 100 ps rise times.

The 40V AVI-V-3L-B family offers operation at pulse repetition frequencies as high as 100 kHz, with 500 ps rise and fall times. The pulse width is adjustable from 1 to 20 ns.

The higher-voltage AVI-V-HV2A-B family provides rise times of 400 ps, pulse widths variable from 4 to 100 ns, variable amplitudes of up to 100V, and pulse repetition frequencies of up to 20 kHz.

The AVI-V-HV3A-B family is similar, but with slower rise times of 1.5 ns.

Aside from the internal clock, all models can also be triggered by a single-pulse pushbutton or an external TTL-level trigger input. A delay control and a sync output are provided for oscilloscope triggering. A gate input is also provided. Either output polarity can be provided, as well as a dual output polarity option.

All models include a computer control interface (see <http://www.avtechpulse.com/gpib> 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 back-lit 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 <http://www.avtechpulse.com/labview>.

A standard rear-panel Ethernet connector allows the instrument to be remotely controlled using the VXI-11.3, ssh, telnet, and web protocols. In particular, the VXI-11.3 features allows software like LabView to control an instrument using standard VISA communications drivers and network cabling, instead of using older-style GPIB cabling and GPIB controller cards. For details, see <http://www.avtechpulse.com/options/vxi>.

A DC offset or bias insertion option is available. Units with this option include a circuit similar to Model AVX-T at the output. The required DC offset or bias is applied directly to rear panel solder terminals. All models are available with a monitor option that provides an attenuated (20 dB or ÷10) coincident replica of the main output pulse.

All models require 100-240V, 50-60 Hz prime power.

Actual test waveforms from shipped units are available from the online data pages for each model, at:

- <http://www.avtechpulse.com/speed/avi-v/#testresults>
- <http://www.avtechpulse.com/speed/avi-v-hv1a/#testresults>
- <http://www.avtechpulse.com/speed/avi-v-hv2a/#testresults>
- <http://www.avtechpulse.com/speed/avi-v-hv3a/#testresults>
- <http://www.avtechpulse.com/speed/avi-v-3l/#testresults>

