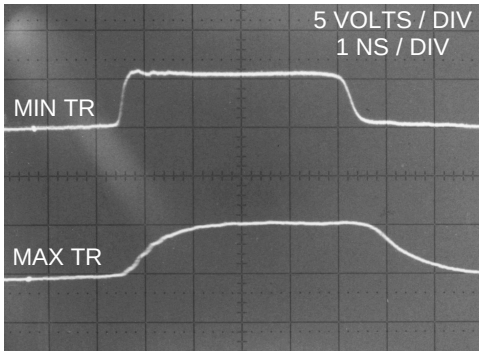

AVMM-2-C-TR

- Rise time variable from 300 ps to 2.0 ns
- Amplitudes to 10 Volts, PRF to 25 MHz
- Pulse widths variable from 0.5 to 10 ns
- Stand alone lab instruments or miniature modules

The AVMM series features a 300 ps rise time, pulse width variable from 1.0 to 10 ns and an output pulse width which is independent of the output amplitude control setting. In addition, a variable rise time option is available (300 ps to 2 ns in 5 discrete steps). The output amplitude for all models is controlled by a front-panel one-turn control. A second one-turn control varies the pulse width.

Models AVMM-1-C and AVMM-2-C provide output amplitudes variable up to 2 and 5 Volts respectively with pulse width variable from 1.0 to 10 ns while Model AVMM-3-C provides up to 10 Volts with a pulse width variable from 1.0 to 5.0 ns.

The pulse repetition frequency is variable from 3 kHz to 25 MHz using the internal clock oscillator that is controlled by a six-position front-panel switch and a one-turn fine control. A delay control and a sync output are provided for sampling scope triggering purposes. The units can also be triggered externally using a TTL-level pulse. The propagation delay in the externally triggered mode is typically 30 ns and an optional variable relative delay (0 to 5 ns) is available. Either output polarity or an optional dual output polarity can be provided and the units include an output DC offset or bias insertion function (similar to Model AVX-T, see page 98). The required DC offset or bias is applied directly to rear-panel solder terminals. An available option provides an internally generated DC offset (0 to ± 5V) that is controlled by a front-panel one-turn control. Polarity inversion in dual polarity units is accomplished by means of an inverting transformer module which mates to the pulse generator output port. AVMM units are available with a monitor option that provides an attenuated (20dB or X10) coincident replica of the main output pulse. Additional options include electronic control (0 to +10V) of output amplitude, pulse width, propagation delay and DC offset. Units with these options also include the standard front-panel one-turn controls. Models AVMM-1-C, -2-C and -3-C require 120/240V (switchable) 50-60 Hz prime power.

All AVMM units are also available in a DC-powered (+24V) miniature module form (AVMM-1, AVMM-2, AVMM-3). These modules require a TTL input trigger signal and the output PRF equals the input trigger PRF. Pulse width and output amplitude are controlled by one-turn controls and an optional relative delay (0 to 5 ns) control is available.

The AVMM series is ideally suited for systems or laboratory applications such as logic family propagation testing, TDR, radar, optical and cable communications, SAW, nuclear, switching and propagation time studies and educational fields. In some cases, the specifications can be adapted to satisfy a particular requirement. Contact the factory with your special requirement.

Model:	AVMM-1-C[1] AVMM-1	AVMM-2-C[1] AVMM-2	AVMM-3-C[1] AVMM-3
Amplitude[3,4]: (50 Ohm load)	Variable to 2 Volts	Variable to 5 Volts	Variable to 10 Volts
Pulse width[3]:	Variable 1.0 to 10 ns		Variable 1 to 5 ns
PRF:	0 to 25 MHz (-C units & modules, externally triggered) 3 kHz to 25 MHz (-C units, internally triggered)		
Rise time[2]:	300 ps or variable 300 ps to 2.0 ns[2]		
Fall time[2]:	600 ps or variable 600 ps to 2.0 ns[2]		
Polarity[5]:	Positive or negative or both (specify)		
Propagation delay:	≤ 30 ns (Ext trig in to pulse out)		
Variable propagation delay option[3,6]:	0 to 5 ns		
Jitter:	± 15 ps (Ext trig in to pulse out)		
DC offset or bias insertion[3,7]:	Apply required DC offset to back-panel solder terminals (± 50 Volts, 250 mA max)		
Trigger required:	Modules, and -C ext trig mode: +5 Volts, 10 ns or wider (TTL)		
Sync delay:	Sync out to pulse out, -C units only: Variable 0 to 200 ns		
Sync output: (-C only)	+0.5 Volts, 20 ns, will drive 50 Ohm loads		
Monitor output option[8]:	Provides a 20 dB attenuated coincident replica of main output		
Connectors: -C: Modules:	Out: SMA, Trig: BNC, Sync: BNC, Monitor: SMA Out: SMA In: SMA, Power: Solder terminals		
Other:	For power requirements, dimensions, chassis material, mounting and temperature range, see the AVP data sheet, page 24.		

1) -C suffix indicates stand-alone lab instrument with internal clock and line powering. No suffix indicates miniature module requiring DC power and external trigger. (See page 112 for additional details of the basic instrument formats).
2) For rise times variable from 300 ps to 2.0 ns via a five-position switch add suffix -TR. TR switch also affects fall time.
3) For electronic control (0 to +10V) of amplitude, pulse width, delay or offset suffix model number with -EA or -EW or -ED or EO. Electronic control units also include standard front-panel one-turn controls.
4) For operation at amplitudes of less than 10% of full-scale, best results will be obtained by setting the amplitude near full-scale and using external attenuators on the output.
5) Indicate desired polarity by suffixing model number with -P or -N (i.e. positive or negative) or -P-PN or -N-PN for dual polarity option where the suffix preceding -PN indicates the polarity at the mainframe output port. (-PN available only for -C units).
6) Indicate delay option by suffixing model number with -D.
7) For internally generated DC offset (0 to ±5 V, one-turn control) add suffix -OT to model number. -OT and -EO options are not available on modules.
8) For monitor option add suffix -M.