

# GM200-3 Gate Module



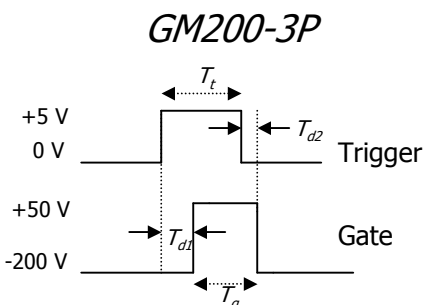
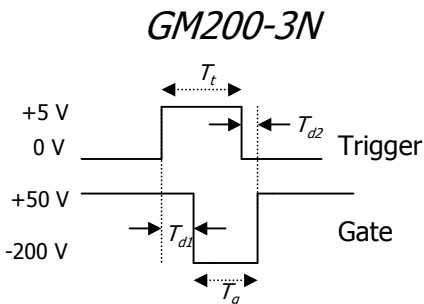
**Fast photocathode switching of image intensifiers or photomultipliers**



GM200-3N – ON times down to 3 ns  
GM200-3P – OFF times down to 3 ns

	Minimum	Maximum
Gate Time $T_g$	3 ns FWHM	Unlimited (d.c.)*
Repetition Rate	0 Hz "Single Shot"	200 KHz Self-limited
ON Voltage Output		-200 V
OFF Voltage Output		+50 V
Trigger Input	+3.2 V into 50 $\Omega$	+5.5 V into 50 $\Omega$
Power Supply	+10 V	+14 V
Supply Current @ +12 V	175 mA (No Trigger)	550 mA (200 KHz 250 pF load) 1 A inrush current
Jitter	50 ps r.m.s.	
Maximum Capacitance Load	250 pF	
Minimum Resistance Load	10 M $\Omega$	

\* Large gate times > 500  $\mu$ s trigger a holding mode that adds 5  $\mu$ s to the gate window.

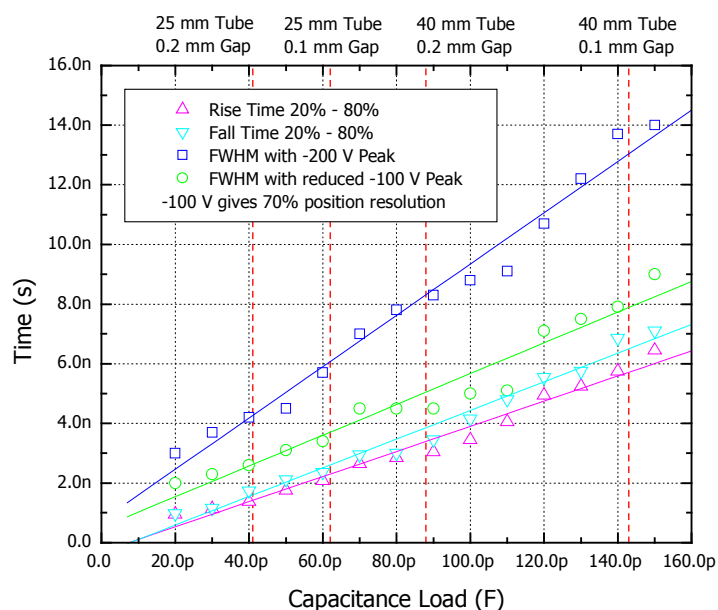
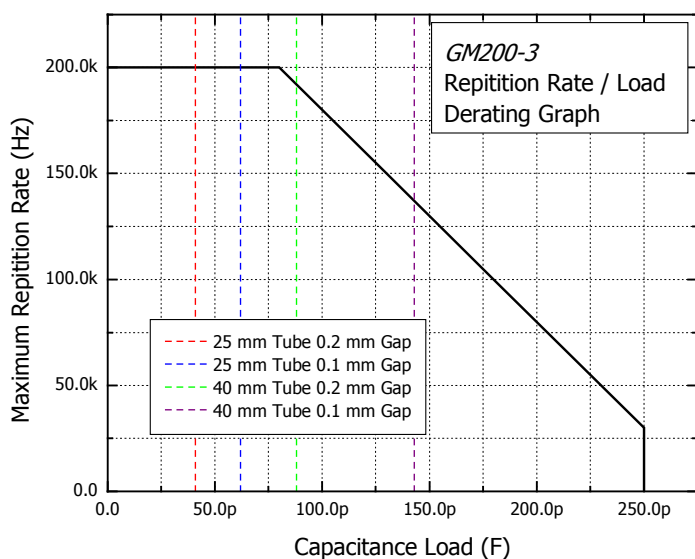
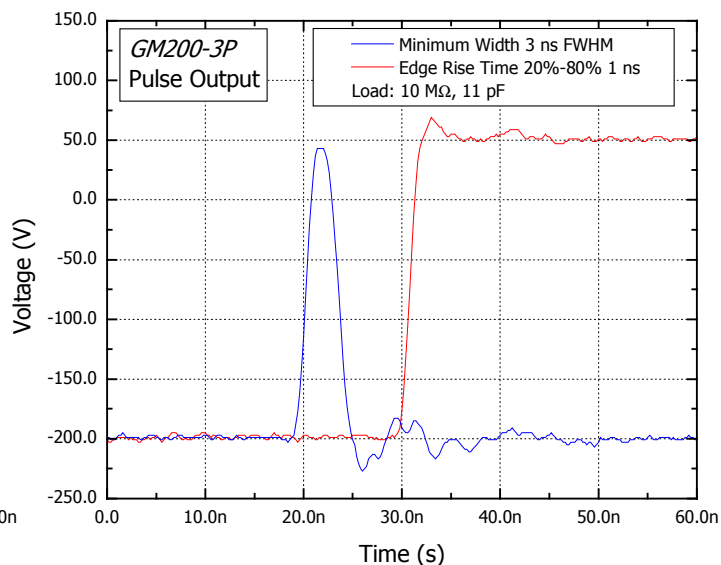
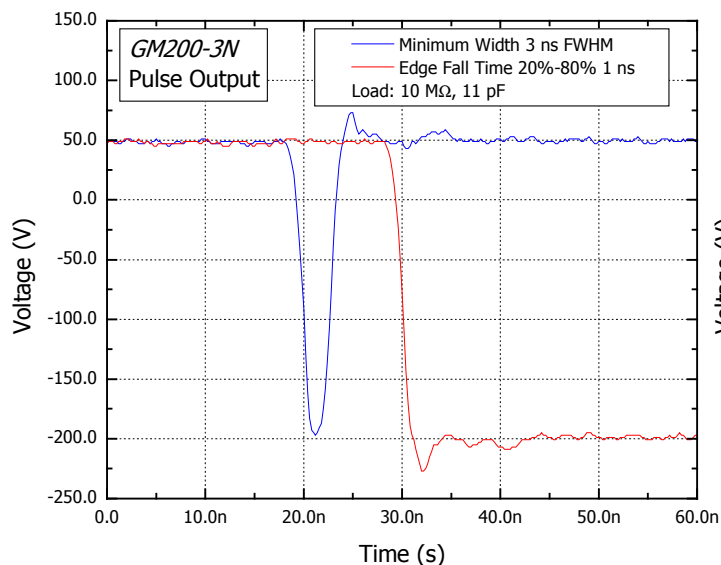


Leading Edge Propagation Delay	$T_{d1}$	50 ns (40 to 60 ns optional)
Trailing Edge Propagation Delay	$T_{d2}$	40 ns
Trigger / Gate Offset Time $T_t - T_g$	$T_{d1} - T_{d2}$	10 ns (0 to 20 ns optional)
Dead Time after Trailing Edge		100 ns
Minimum Trigger Width	$T_t$	6 ns

**Laser Walkthrough.** Laser Pulse < 50 ps.  
200 ps / Frame. Capacitance Load 100 pF.

GM200-3N  
-100 V Reduced Voltage Pulse

GM200-3P



Mechanical	Housed	Bare PCB
Height	26 mm	13 mm
Width	56 mm	38 mm
Length	86 mm (106 mm including connectors)	80 mm (106 mm including connectors*)
Weight	115 g	45 g
Trigger Input Connector	SMA	
Power Supply Connector	SMB	
Gate Pulse Connector	SMA	

\* Right-angled connectors would reduce the total length to 100 mm and enable easier access. Available on request.

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