

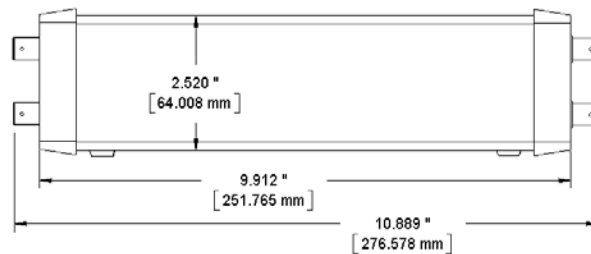
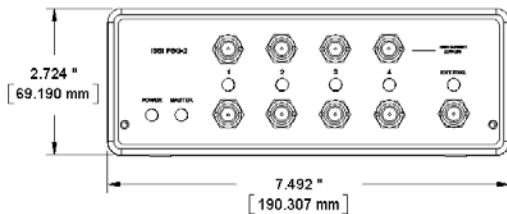
Pulse/Delay Generator

(Product ID: PSG-3)

The PSG-3 is a four-channel pulse/delay generator. It can be used as a master clock for timing and delay control. It can be externally triggered and/or gated by an external event. Pulse width, delay, repetition rate, and other timing parameters can be controlled by one of two available interfaces.



Capability	Two dual-channel independently programmable pulse generators	Input trigger thresholding
Features	Four high-current TTL outputs	Divide-by-N circuit
Control	Multiple PSG-3s can be cascaded to increase the number of channels	Easy to use software interface or TCP/IP API commands for integration
Networking	Multiple devices can be connected and simultaneously controlled over a network	10/100 Mbps Ethernet interface
Versatility	Multiple timing bases (s, ms, μ s, ns)	BNC inhibit input (TTL high level) to allow the PSG-3 to be gated by an external source



The PSG-3 replaces the PSG-2 in the ISSI product line.



PSG-3 Specifications

I/O Configuration	
TTL Outputs	4 standard, 4 high-current (mirroring standard)
Inputs	1 Ext. Trig. Input 1 Inhibit
Divide-by-N	1 input, 1 output

Internal Generator	
Repetition Rate	0.100 Hz to 25.00 MHz
Resolution	20 nanoseconds
Burst Mode	1 – 131,072 pulses
Output Modes	Single-shot, burst, continuous
Master Clock	50 MHz, +/- 30 ppm Dual Clocks allow for independent repetition rates from one PSG-3
Timing Clock Settings	20-, 40-, 80-, 160-ns

Programming	
Control Mode	Internally triggered, externally triggered and/or gated. Generator 1 & 2 can be independently set to internally or externally triggered.
Multiplex	None
Divide-by-N	2-255

Trigger Input	
Threshold	0.05 - 5.0 V
Max Input Voltage	7.0 V
Max Input Frequency	5 MHz
Input Impedance	>1 M Ω

TTL Outputs	
Output Impedance	50 Ω
Output Voltage	@ 50 Ω : 2.5 V (Standard outputs) @ 1 K Ω : 4.0 V (High-current outputs)
Pulse Width	20 ns to 10.736 s
Delay Width	20 ns to 10.736 s
Rise Time	4 ns
Fall Time	4 ns

Communication Interfaces	
Ethernet	1 input, 10/100 Mbps
USB 2.0	1 input, type B
RJ-11	2, sync in and sync out (Master/slave config.)

Power Input	
External Power Input	85-264 VAC, 50-60 Hz

Export	
ECCN	EAR99