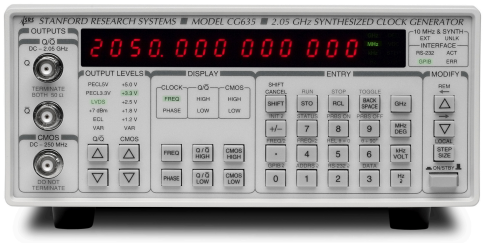
Comparison of SRS Clock Generators

Overview: A high- performance programmable clock generator produces precise, stable, and configurable timing signals for synchronizing digital integrated circuits and electronic systems. SRS offers two models of clock generators, the CG635, and the CG792. Here is a comparison of the two product models.

	SRS CG635	SRS CG792
Differences		
Frequency Range	1 µHz to 2.05 GHz (16 digits)	DC, 1 mHz to 2.2 GHz (11 digits)
Number of Channels	1	2, 3, or 4 independent synchronizable channels
Differential Outputs	Amplitude: 0.2 to 1.0 V High level: −2.0 to +5.0 V	Amplitude: 0 to 1.2 V Vcm: −3.0 to +2.0 V
CMOS Outputs	≤ 250 MHz, 0.5–6.0 Vpp adj.	≤ 250 MHz, fixed 3.3 V
Modulation	Ext. time modulation, ±5 ns	Int/Ext. frequency, phase, jitter
PRBS	PRBS7 to 1.55 GHz (Opt. 01)	PRBS31 to 100 MHz (built-in)
Remote interfaces	GPIB and RS-232	USB, Ethernet, and RS-232
Similarities		
Differential Output Rise/Fall times	< 100 ps (20–80 %) transitions	
CMOS Output Rise/Fall times	< 1 ns transitions (to 250 MHz)	
Jitter (rms)	< 1 ps (1 kHz–5 MHz)	
Wander (p-p)	< 20 ps	
Spurious Signal	< −70 dBc within 50 kHz of carrier	
Timebase options	TCXO (Standard), OCXO (Opt. 2) or Rb (Opt. 3)	

CG635 Advantages

- 16-digit frequency resolution
- Adjustable CMOS voltage levels
- RS-485 and LVDS twisted-pair outputs drive remote receiver modules
- GPIB interface for legacy ATE integration



CG792 Advantages

- Up to 4 independent clock channels
- Internal/external frequency/phase/jitter modulation
- Digital control input for blanking, polarity, modulation on/off
- Ethernet and USB interfaces for network-based automation