Syscomp Electronic Design's CGR-201 CircuitGear Mark II is a PC-based instrument with powerful features. It combines a digital storage oscilloscope, standard function generator, arbitrary waveform generator, digital I/O, pulse generator and vector network analyser in one pocket-sized package, powered entirely from a single USB port. All functions can be controlled from a computer running the Windows, Linux, or Mac operating systems, using our open-source software. The CGR-201 oscilloscope features a sampling rate of 40MS/s. The waveform generator can generate standard and arbitrary waveforms at frequencies ranging from 0.05Hz to 10MHz in one sweep, eliminating the need for range selection or mechanical controls. The oscilloscope and waveform generator can be combined to form a vector network analyser using our open-source software. The fully documented command set is also compatible with any programming language that can communicate with a COM port.

Key Features
- Portable, completely USB powered
- Powerful digital storage oscilloscope
- Standard and arbitrary waveform generator
- Vector Network Analyser
- Digital Inputs and Outputs
- Pulse Generator
- Open-Source Software

Compatibility
- Windows XP/Vista/7/8.X/10
- Linux
- Mac OS X

Typical Applications
- General purpose electronics test
- Education/Electronics labs
- Field technicians/engineers

www.syscompdesign.com
CGR-201
Multi-Function USB Lab Instrument

General Specifications
- Interface: 1 USB Port
- Power Supply: USB Bus Powered
- Dimensions: 6.25" x 3.5" x 1" (246 x 138 x 40mm)

Oscilloscope
- Number of Channels: 2
- Maximum Sampling Rate: 40MS/s
- Bandwidth: 5 MHz
- Input Voltage Span: 7 Ranges in 1:2:5 Sequence
- Input Ranges: 20 mV/div to 5V/div
- Vertical Calibration: Yes, Software
- Input A/D: 10 bit
- Input Impedance: 1MΩ || 20pF
- Timebase Span: 50ns/div to 100ms/div
- Timebase Ranges: 21 Steps in 1:2:5 Sequence
- Trigger: Normal, Auto, Single Shot, Ext.
- Trigger Polarity: +/-
- Trigger Level: Adjustable via on-screen cursor
- Pre & Post Trigger Display: Adjustable via on-screen cursor
- Sample Memory: 4k samples/channel
- Additional Modes: X-Y Plot, Spectrum Analysis, Waveform Math

Arbitrary Function Generator
- Output Frequency Range: 0 - 10MHz
- Frequency Resolution: 0.05 Hz
- Amplitude Control: Hardware
- Offset Control: Hardware
- Vertical Resolution: 8-Bits (Independent of Amplitude)
- Output Range: +/-3V
- Output Impedance: 50 Ω
- Standard Waveforms: Sine, Square, Triangle, Sawtooth, Noise
- Arbitrary Waveforms: 8-Bit Vertical Resolution (2048 Time Points)

Digital I/O
- Output: 8 bits, 5 volt, HCMOS
- Input: 8 bits, 3 or 5 volt, HCMOS
- PWM: Variable frequency, Variable duty cycle
- Trigger: Trigger Input/Output

Bode Plotter
- Type: Vector Network Analyser
- Frequency Range: 0.1 Hz to 10 MHz
- Amplitude Response: Yes
- Phase Response: Yes
- Oscilloscope Display: Yes

What’s Included
- CGR-201 USB Instrument
- USB Cable
- Software Download Instructions

Contact Us
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www.syscompdesign.com