## STG5 Stimulus Generator

Voltage and current stimulation in one compact device.



- Synchronization and triggered stimulation capabilities with a 5µs reaction time.
- Scalable and upgradeable as your needs change.
- Robust, user-friendly software.



# Meet your new favorite thing in the lab.

Your lab equipment shouldn't make your life harder. The STG5 makes voltage and current stimulation for almost any preparation or application more precise and reliable.



### All-in-one voltage and current stimulation.

The STG5 includes both voltage and current stimulation capabilities, and it's easy to switch modes in the software with just one click.

#### Smaller footprint than your average stimulus generator.

Bigger isn't always better. The STG5 is more compact than most, meaning more space in your lab. If you need more channels, save space in your lab by stacking the STG5 Satellite Units on top of the Base Unit.

## Wide output range for multiple applications.

The STG5 Base Unit features 3 different current ranges:

Up to 160μA (resolution: 100nA)
Up to 1.6mA (resolution: 1μA)
Up to 16mA (resolution: 10μA

By cascading all channels, you can achieve an output of 128mA.

Adjust your output quickly, easily, and precisely within the software. The STG5 offers high precision at the lower limit, and high output at the upper limit.

#### Fast rise time + high time resolution = more accurate data.

A quicker rise time means both a higher pulse frequency as well as more accurate waveform-tostimulus representation at higher frequencies.

- Rise time for current and voltage stimulation of <2µsec (10%-90% loading curve).
- Temporal pulse resolution of 5µsec, resulting in stimulation speeds of up to 100kHz.

#### Flexible base-plus-satellite system allows you to scale up if needed.

No matter your throughput needs, we've got you covered. Your purchase includes our STG5 Base Unit, which includes 2 channels, and additional STG5 Satellite Units can be purchased to increase your throughput needs. It's easy to connect up to 3 STG5 Satellite Units to one Base Unit, giving you a total of 8 channels. Additional Satellite Units can be purchased at any time.

All channels are galvanically isolated against each other, meaning that there's zero crosstalk between channels –and with no need to purchase a separate galvanic isolator.





#### Robust and easy-to-use.

No more analog dials, manual configurations, or guessing games. Our intuitive MC\_Stimulus III software allows you to create and save custom patterns – just define your waveform parameters, enter duration and repetition, and hit "Start."

Use the MC\_Stimulus III software to change your amplitude according to your needs. Need to switch between stimulating voltage and current? The software makes that both fast and easy, too.



#### Easily create complex stimulation patterns.

Our MC\_Stimulus III software allows the STG5 to group and trigger stimulation patterns and output channels according to your experimentation needs. Choose independent or synchronized stimulation patterns with a 5µs response time, and incorporated into complex feedback loops within larger setups, if needed.





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