

Technical Specifications: Stimulus Generator 5

General Specification	
Operating Temperature	10 °C to 50 °C
Storage Temperature	0° C to 70 °C
Operation Humidity	10 - 85 %, non condensing
Storage Humidity	10 - 85 %, non condensing
STG 5 Device	
Base: Dimensions (W x D x H)	325 mm x 310 mm x 47 mm
Satellite: Dimensions (W x D x H)	325 mm x 310 mm x 37 mm
Base: Weight	2.1 kg
Satellite: Weight	1.44 kg
Base: Number of analog output channels	2
Satellite: Number of analog output channels	2 per satellite, up to 3 satellites, so in total up to 8 output channels
Output voltage	-8 V to +8 V @ max. \pm 20 mA
Output voltage resolution	250 μ V
Output current ranges	160 μ A, 1.6 mA and 16 mA
Output current resolution 160 μ A	6.25 nA
Output current resolution 1.6 mA	62.5 nA
Output current resolution 16 mA	625 nA
Rise time (10 - 90 %) voltage	1.7 μ s @ $\Delta U = 8$ V
Time lag between Sync Out and current output	2.5 μ s
Inherent rise time (10-90 %) current	2 μ s @ $R_L = 100 \Omega$, 16 mA
Time lag between Sync Out and current output	2.5 μ s
Resolution	16 bit
Time resolution	5 μ s
Output signals	Freely programmable (rectangular, ramp, sinusoidal)
Maximum frequency (rectangular waveform)	100 kHz
Memory capacity for stored waveforms	64 MB

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Timing on external Trigger	
Minimum time length of trigger input (TTL)	40 μ s
Time lag between trigger input and Sync Out	70 (\pm 10) μ s
Maximum trigger input frequency	10 kHz
Interfaces and Connectors	
Coax connector for analog stimulation channels	2 per base, 2 per satellite
Coax connector for Sync Out for synchronization with following devices	2 per base, 2 per satellite
Coax connector for Trigger In for synchronization with preceding devices	8, only on the base device
Interface (connection to computer)	USB-C port
Download rate	max. 480 Mb per second
External Power Supply	
Supply voltage	100 - 240 VAC, 1.4 A, 50 - 60 Hz
Unit voltage	24 VDC, 60 W
Software	
MC_Stimulus III	Version 0.5 and higher
Operating system	Microsoft Windows [®] 10, (64 Bit), English and German versions supported
Data import / export	ASCII file format