

Stimulus Generator 4004 – 160 μ A Technical Specifications

General	
Operating temperature	10 °C to 50 °C
Storage temperature	0 °C to 70 °C
Dimensions (W x D x H)	310 x 325 x 85 mm
Weight	2.8 kg
Fuse	Internal, 3.15 A slow
Number of analog output channels	4
Output voltage	-8 V to +8 V @ max. \pm 20 mA
Output voltage resolution	1 mV
Rise time (10 - 90 %) voltage	1.7 μ s @ Δ U = 8 V
Time lag between Sync Out and voltage output	15 (\pm 2) μ s
Output current	-160 μ A to +160 μ A @ max. 120 V compliance voltage (between +I and -I)
Output current resolution	20 nA
Output current slope	600 μ A / μ s @ RL = 10 k Ω
Rise time (10-90 %) current, 0 – 100 μ A	1.4 μ s @ RL = 10 k Ω
Time lag between Sync Out and current output	15 (\pm 2) μ s @ RL = 10 k Ω
Resolution	14 bit
Time resolution	20 μ s
Output signals	Freely programmable (rectangular, ramp, sinus)
Maximum frequency (rectangular waveform)	25 Hz
Memory capacity for stored waveforms	64 MB
Timing on external trigger	
Minimum time length of trigger input (TTL)	40 μ s
Time lag between trigger in and Sync Out	70 (\pm 10) μ s
Maximum trigger input frequency	10 kHz
Interface and connectors	
Connector for stimulation channels	2 mm banana plug
Sync Out for synchronization	4 digital channels via coax cable
Trigger In for synchronization	4 digital channels via coax cable
Interface (connection to computer)	USB 2.0 High Speed
Download rate	Maximal 480 Mb per second
Power supply unit (MPU30)	
Input voltage	90 – 264 VAC @ 47 – 63 Hz
Output voltage	11 – 13 V
Max. Power	30 W
Software	
MC_Stimulus II	Version 3.4.4 and higher
Operating system	Microsoft Windows \otimes 10, 8 and 7 (32 or 64 Bit), XP or Vista with NTFS, English and German versions supported
Data import / export	ASCII file format