

Kentech Instruments Ltd.

CPS high voltage pulse source



The CPS range is a budget priced range of pulsers that offer pulse output waveforms comparable to our higher ranges but with low repetition rates and fewer features. The only options for these pulsers are for shaped output pulse forming and an internal repetition rate and delay generator. This latter option requires a larger package size.

These pulsers will find applications where they are built into systems which operate at moderate repetition rates and where there is no equipment to change the characteristics of the pulser once set up.

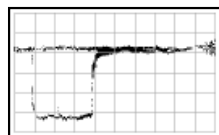
Specification

Amplitude	CPS1 >2kV, 50Ω
	CPS2 >4kV, 50Ω
	CPS3 >6kV, 50Ω
Max. PRF	CPS1 1kHz
	CPS2 100Hz
	CPS3 10Hz
Rise time	<150ps
Jitter	<20ps rms
Pulse shape	fast rise and fall with 2ns time constant.

Options

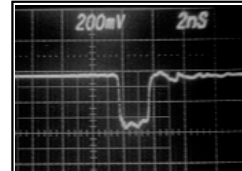
- /S Internal pulse forming. Factory set pulse length between 200ps and 2ns fwhm. This option reduces the output voltage to ~65% of that of the unshaped output.
- /MC 1ns to 6ns FW, quasi-monocycle, MC option
- /P positive output
- /N negative output
- /D Internal rate generator and delay generator.

Typical output waveforms from CPS3/S pulse sources.

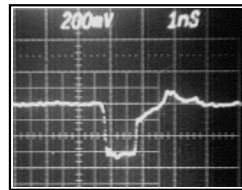


1kV/div 5ns/div
CPS3/N/S

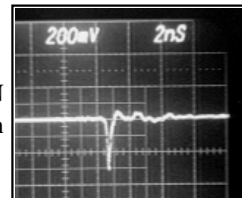
CPS1S/2ns/N
1kV per division



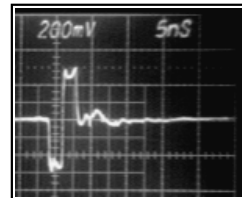
CPS1S/1ns/N
1kV per division



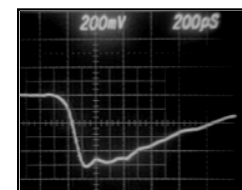
CPS1S/200ps/N
1kV per division



CPS1S/MC/4ns
400V per division



CPS1/N
1kV per division



CPS1/N
1kV per division



Unit 9, Hall Farm Workshops, South Moreton, Didcot, Oxfordshire OX11 9AG, U.K.

Tel: 0 1 235 510 748 Fax: 0 1 235 510 722
International Tel: +44 1 235 510 748 International Fax: +44 1 235 510 722
email info@kentech.co.uk

HIGH VOLTAGE PULSER SUMMARY

Pulser	Amplitude	T _{rise} /PW	PRF	RMS Jitter	Features	Options
APG1	>100V	150ps/150ps	10kHz	10ps	S/D	
ASG1	>200V	100ps/8ns step	1kHz	10ps	St/D	
SPSV	>1kV	0.7ns/1,2,4,8,10 & 12ns	100Hz	10ps	S/D	
CPS1	>2kV	150ps/2ns decay	1kHz	20ps	/S	
CPS2	>4kV	150ps/2ns decay	100Hz	20ps	/S	
CPS3	>6kV	150ps/2ns decay	10Hz	20ps	/S	
HMP1	>4kV	120ps/5ns	100Hz	10ps	S/D/Q/V/F	
HMP2	>2 x 4kV	120ps/5ns	100Hz	10ps	S/D/Q/V/F	
PBG1	>6.5kV	100ps/5ns	100Hz	10ps	S/D/V/F	
PBG2	>8.5kV	100ps/5ns	100Hz	10ps	S/D/V/F	
PBG3	>12.5kV	100ps/5ns	100Hz	10ps	S/D/V/F	
PBG5	>24kV	150ps/3ns	1kHz	20ps	S/D/V/F/B	
PBG7	> 45kV	150ps/3ns	500Hz	20ps	/B	

Features and Options

S Shaped pulse
 St Step pulse
 D Internal switchable delay, rate generator, trigger indicator, auxiliary low level outputs
 Q Fast rise time (quick)
 V Variable output (approximately 60% to 100%)
 F 1kHz repetition rate (some pulsers can achieve this without this option, consult factory)
 B Balanced outputs
 Units are available with multiple synchronous outputs,
 e.g. a PBG5 will drive sixteen 50Ω outputs to 6.4kV

Voltages are into 50Ω, both positive and negative outputs are available.

Visit Our Web Site at :
<http://www.kentech.co.uk>

Overseas Agents

France	Armexel, 3 Rue de la Gauchère, BP 20, 92151 Suresnes, France.	Contact Name Tel: Fax:	Yves le Ruyet 1 42 04 20 97 1 40 99 99 16
Germany	L A Vision, Gerhard-Gerdes-Str.3, D-37079 Göttingen Germany e-mail 100600.433@compuserve.com	Contact Name Tel: Fax:	Thomas Seelemann (0) 551 50549-21 (0) 551 50549-11
India	Scientific Solutions, ADI Business Center, C-10 Ashoka Tower, C-Block Community Center, Janak Puri, New Delhi - 110058, India e-mail sangs@delnet.ren.nic.in	Contact Name Tel Fax:	Sanjeev Bavejas 91-11-5508557 91-11-5555938
Italy	Teleid s.a.s. Via Tremiti, I ROMA 00141, Italy.	Contact Name Tel: Fax:	Andrea Marin 06-8172532 06-8170401
Japan	Science Laboratories Inc., 2 - 73 Makinoharau, Matsudo City, Chiba Pref. 270 Japan. scilab@ppp.bekkoame.or.jp	Contact Name Tel: Fax:	Kazy Maeda 473 87 1711 473 87 7661
Netherlands	Arstec, Neck 7a 1456 AA Wijdewormer Holland.	Contact Name Tel Fax	Hans Bonson 02990 28908 02990 70482
U.S.A.	Grant Applied Physics, Inc., 101 Lombard Street , #912W, San Francisco CA 94111-1151, U.S.A. grantappliedphys@hotmail.com	Contact Names Tel: Fax:	Richard W. Lee (415) 421-4739 (415) 421-4739

All other enquiries should be addressed directly to:-

Kentech Instruments Limited,

Unit 9, Hall Farm Workshops, South Moreton, Didcot, Oxfordshire OX11 9AG, U.K.
 International Tel: +44 1235 510 748 International Fax: +44 1235 510 722
 e-mail info@kentech.co.uk web: //www.kentech.co.uk

From small to very large; custom built pulsers are available for a wide range of applications.

Kentech Instruments Ltd. manufactures a large range of pulse generators and builds systems to customer specification. If you do not see a suitable instrument listed here please consult the factory to discuss your requirements.

Kentech Instruments Ltd. also make a range of time resolving and imaging devices for both X-ray and Optical wavelengths. In particular we manufacture gated optical image intensifier systems with gate widths down to 50ps and high repetition rate systems with bandwidths to GHz.

For X-rays we can offer gated imager and streak cameras.



The Kentech HRI (High Rate Imager)
 Optical image modulation to 1GHz,
 gate widths to 300ps at 110MHz
 repetition rate

Kentech Instruments Ltd. reserves the right to modify the price or specification of products without notice.