Everyone needs TRANSDUCERS for measuring electrical parameters.

SURETECH
Pulse Peak & Sine Voltage Sensor

Typical Applications:

- ✓ Cable and cord pulse testing
- ✓ Laboratory HV and transient and Sine voltage measurements
- ✓ High voltage impulse measurements
- ✓ Lightning impulse measurements
- ✓ Safety interlocks in production equipment
- ✓ Etc.

SURETECH™

Pulse & Sine Sensor

Input: 0 - 25kV (neg) peak pulse
0 - 5kV AC rms 50/60Hz
Aux PSU 90 - 260 V dc / ac

Output: 0 - 5 / 7.5V dc Volts, RS232

DOWN MODE UP

Terminal Allocations

1 Pulse sns (dc)	8 Relay pulse A
2 Pulse sns (trnst)	9 Relay pulse B
3 +12Vdc supply	10 Relay sine A
4 0V supply	11 Relay sine B
5 -9Vdc supply	12 Live
6 Sine sns (ac)	13 Neutral
7 Sine sns (dc)	14 Ground

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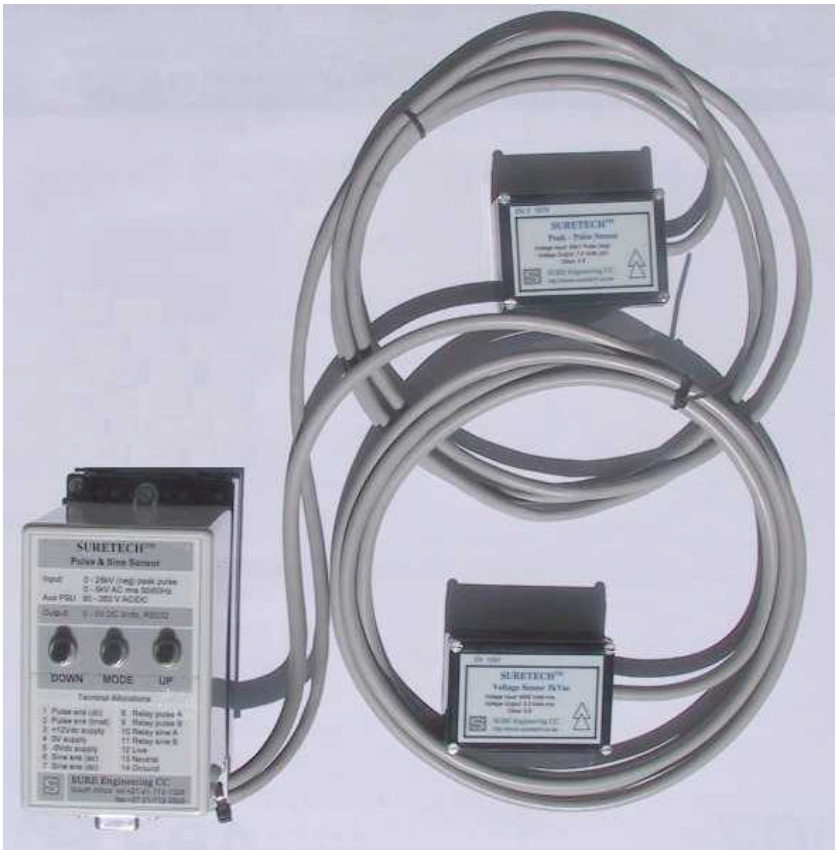

General Features:

- ✓ Measurements through insulation
- ✓ Ultra linear measurement circuits
- ✓ Sensor for wide bandwidth pulse signals
- ✓ Sensor for wide bandwidth sine signals
- ✓ Filters to control measurements
- ✓ Poly-urethane resin potted sensing components for long life, and stability
- ✓ Wide selection of input and output options including wide bandwidth analog, relay, opto-isolated, and RS232
- ✓ Wide selection of auxiliary power supplies
- ✓ Galvanic isolation from HV source
- ✓ Engineering backup to provide you support for design, applications information, installation & calibration, maintenance
- ✓ Patents pending

Advantages of Non-Contact Voltage sensors:

- ✓ Safety
- ✓ Reliability
- ✓ Accuracy with stable operating environment
- ✓ Linearity
- ✓ Very compact sensors can be designed to fit into very tight space constraints
- ✓ Sensors provide a very cost effective option to measure very high ac and transient voltages
- ✓ A very wide range of voltages can be catered for

RS232 Output:

The controller receives low level signals from the pulse peak sensor and sine voltage sensor. A wide range of options for processing is available from SURETECH product range such as precision rectifiers, frequency (harmonic) analysers, analog to digital samplers, RS232 outputs, data loggers, threshold detectors, smart communications, process controllers, etc receives the following sort of data:

Secs	*Mode Pulse/ Sine*	*Vsine [volts rms]*	*Vsine threshold*	*Sine Relay*	*Vpulse [volts peak]*	*Vpulse threshold*	*Pulse Relay*
00002636	MP	S=3946	St=2800	Rs=0	P=00258	Pt=23000	Rp=1
00002637	MP	S=3944	St=2800	Rs=0	P=00241	Pt=20000	Rp=1
00002638	MP	S=3942	St=2800	Rs=0	P=00241	Pt=17000	Rp=1
00002639	MP	S=3948	St=2800	Rs=0	P=00250	Pt=14000	Rp=1
00002640	MP	S=3948	St=2800	Rs=0	P=00247	Pt=10000	Rp=1
00002641	MP	S=3949	St=2800	Rs=0	P=00256	Pt=07000	Rp=1
00002642	MP	S=3951	St=2800	Rs=0	P=00244	Pt=04000	Rp=1
00002643	MP	S=3949	St=2800	Rs=0	P=00223	Pt=01000	Rp=1
00002644	MS	S=3948	St=2800	Rs=0	P=00205	Pt=01000	Rp=1
00002645	MS	S=3948	St=2800	Rs=0	P=00233	Pt=01000	Rp=1

Specifications:

PARAMETER	CONDITIONS	MIN	NOM	MAX	UNIT
Sine Voltage Range	Sensor operating distance from HV source = 25mm (other FSD available)	0		5	KV ac rms
Pulse Voltage Range	Sensor operating distance from HV source = 25mm (other FSD available)	0		-25	KV peak
Sine Output Voltage (term 6)	0 - 5kV ac	0		3.3	V ac rms
Sine Output Voltage (term 7)	0 - 5kV ac	0		+5.0	V dc
Pulse Output Voltage (term 1)	0 to -25kV ac	0		+7.5	V dc
Pulse Output Voltage (term 2)	0 to -25kV ac	0		+7.5	V inst
Accuracy (Sine sensor)	Once set, and capacitive environment stable		0.3		%
Accuracy (Pulse sensor)	Once set, and capacitive environment stable		<1		%
Linearity (Sine)	Over operating range 0 to FSD		0.2		%
Linearity (Pulse)	Over operating range 0 to FSD		<1		%
Temperature	Operating range	0		50	Deg C
Aux Power Supply Voltage range		90		260	V ac / dc
Aux Power Supply - VA requirement			1	2	VA
Frequency response - sine sensor		20	60	5000	Hz
Pulse response time - pulse sensor	Negative transient	1	10		uS
Response time (Sine)	Time constant		<100		ms

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