

SURGITRON[®] PM

Model 1455-85-PM

3 Phase, 208Y/120 Vac, 4 Wire, Wye Surge Protector and Power Monitor

• Unique Features:

- Plug-in MOV modules with Patented individual thermal disconnects.
- First of its kind digital “Percent Protection Remaining” monitoring.
- Internal dial-up modem communicates with any Windows based PC and **SURGITRON PM/PMT** software.
- Internal monitor reports true RMS voltage, sags, swells, surges, sub-cycle dropouts, and multi-cycle outages.

General Specifications:

SPD Category and Type		Main Panel or Sub-panel Application	
Nominal Line Voltage, L-N		120 Vac	
Protection Modes		L-N, L-G, N-G	
Maximum Continuous Operating Voltage (L-N)		132 Vac	
Maximum Surge Current, 8/20 μ s (per Phase)		160 kA	
	(L-N and L-G)	80 kA	
	(N-G)	40 kA	
Varistor voltage, 1mA (L-N, L-G, N-G)		240 Vdc	
Suppression Voltage, ANSI/IEEE C62.41 & C62.11 wave shapes, tested per C62.45			
		<u>L-N, L-G</u>	<u>N-G</u>
Location Category A	200 A, 100 kHz Ring Wave	400 V	430 V
Location Category B	500 A, 100 kHz Ring Wave	460 V	460 V
	3 kA, 8/20 μ s Combination Wave	420 V	460 V
Location Category C	10 kA, 8/20 μ s Combination Wave	540 V	560 V
	20 kA, 8/20 μ s Combination Wave	740 V	730 V
UL Suppression Voltage (L-N, L-G, & N-G)			400 V
Surge Energy Capability of all MOVs			8,125 Joules
Surge Life, per phase, 120 Vac applied,	3 kA, 8/20 μ s		> 50,000 operations
	10 kA, 8/20 μ s		> 5,000 operations
Component Response Time			< 1 nanosecond
Relay Contact Rating, N.O. and N.C.			5 A, 24 Vdc/240 Vac
Load Current Rating, Protector Series Connected (Kelvin)			150 A Maximum
	Protector Parallel Connected (Shunt)		Unlimited
Operating Temperature			-40 C to +65 C
UL Listed per UL 1449 and Canadian standards			File No. E74944
Warranty:			5 years

Communications:

One Form C relay for remote alarm connections.

A nine pin (DB-9) connector for RS-232 connection to your Personal Computer serial port

Integral modular telephone jack RJ-11 to connect the dial up V.22 modem to the telephone system.

Communicates with modem equipped Windows95[®] based PC via supplied **SURGITRON PM/PMT** software.

SURGITRON® PM

Model 1455-85-PM

Power up Diagnostics:

Sounds the audible alarm, lights the visual (LED) displays, checks for the presence of protector modules, verifies and displays electrical system frequency, and verifies sub-systems operation.

Monitoring:

Provides true rms voltage readings for each line, accuracy of $\pm 2\%$ at nominal line voltage

Detects and counts sags > 5 cycles, 10% to 90% nominal voltage

Detects and counts voltage swells > 5 cycles, >110% nominal voltage

Detects and counts surges $\geq 20 \mu s$, >130% nominal peak voltage

Detects and counts fractional cycle dropouts $\geq \frac{1}{4}$ cycle

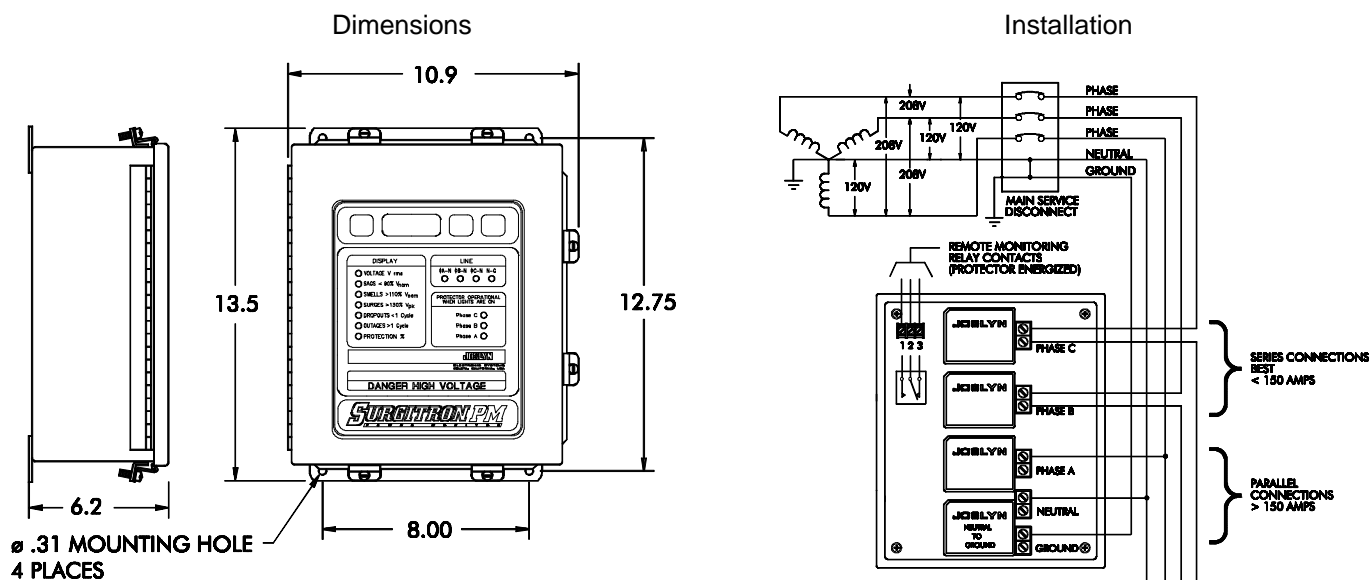
Detects and counts outages > 1 cycle

Saves counts to nonvolatile memory, maximum 999 counts per type

Detects percent protection available each protection module (MOV or SAD)

A 25% reduction of protection triggers an audible alarm that can be reset

A 50% reduction of protection triggers audible alarm, extinguish of LED associated with affected phase, and a change of state in a dual dry contact NO/NC relay output for other local alarming.



SURGITRON® is a trademark of Joslyn Electronic Systems Company.

Windows95® is a trademark of Microsoft Corporation.