

# SERIES 1000 IMPULSE TEST SYSTEM

IMPULSE VOLTAGE TEST SYSTEMS  
DESIGNED TO MEET YOUR TEST NEEDS



IMPULSE GENERATORS TO 2.0MV



DC POWER SUPPLIES  
TO 100KV



IMPULSE MEASUREMENT  
SYSTEMS



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# SYSTEM SPECIFICATIONS

## DC POWER SUPPLY

100KV 30 MA  
MOTORIZED POLARITY REVERSAL  
SHIELDED CABLE OUTPUT  
INPUT V : 240V, 1PH 50/60HZ  
INPUT I : 20A

## VOLTAGE DIVIDERS

BOTH RESISTIVE AND DAMPED  
CAPACITIVE DIVIDERS ARE  
AVAILABLE.

VOLTAGE RATINGS TO 2.0 MV

DIVIDERS ARE SIZED TO  
MEET THE REQUIREMENTS  
FOR THE PARTICULAR  
GENERATOR.

DIVIDERS CAN BE RATED FOR  
SWITCHING AND LIGHTNING  
DUTY

## IMPULSE MEASUREMENT SYSTEMS

### 250MHZ DIGITIZER

2 CHANNEL  
INPUT IMPEDANCE: 1M $\Omega$   
100MHZ BANDWIDTH  
12-BIT RESOLUTION  
128K RECORD LENGTH  
 $\pm 1\%$  ACCURACY

### 200MHZ DIGITIZER

2 CHANNEL  
INPUT IMPEDANCE: 1M $\Omega$   
200MHZ, 75DB DYNAMIC RANGE  
12-BIT RESOLUTION  
256K RECORD LENGTH  
 $\pm 0.5\%$  ACCURACY

## ATTENUATORS

RATIO: 50:1, 150:1, 200:1  
INPUT IMPEDANCE: 2M $\Omega$  || 20PF  
MAX. VOLTAGE: 2000 V PEAK  
ACCURACY:  $\pm 0.5\%$   
INPUT CONNECTOR: PL-259

## STANDARDS

SOFTWARE COMPLIES WITH  
IEEE 4-2013 AND IEC 60-2010  
PARAMETER EVALUATIONS

## IMPULSE GENERATOR

100KV / STAGE  
5KJ OF ENERGY PER STAGE  
FULLY AUTOMATIC OPERATION  
AUTOMATIC POLARITY REVERSAL AND CHARGING CONTROL  
AUTOMATIC TRIGGERING AND SPHERE GAP CONTROL  
AUTOMATIC GROUNDING SYSTEM  
RESISTIVE AND CAPACITIVE SHUNTS  
LARGE PRELOAD CAPACITANCE FOR VOLTAGE STABILIZATION  
TRIGGERED CHOPPING GAPS

## CONTROLS

AB MICROLOGIX PLC BASED CONTROLS  
INTEGRATED CONTROL OF IG AND MEASUREMENT SYSTEM  
AUTOMATIC AND MANUAL GENERATOR CONTROL  
HV ON AND OFF, AUTOMATIC CHARGING  
MANUAL OR AUTOMATIC SPHERE GAP CONTROL  
AUTOMATIC GROUNDING  
MANUAL OR AUTOMATIC TRIGGERING  
CUSTOM AUTOMATION SEQUENCE CONTROL  
CONTROL ROOM INTERLOCK INPUTS  
CB SWITCHED INPUT  
TRIGGER CHOPPING GAP CAPABILITY  
INTERLOCK, RELAY CONTACTS, STARTUP KEY SWITCH  
EMERGENCY OFF PUSHBUTTON  
FIBER OPTIC INTERFACES FOR CONTROL AND MEASUREMENT

## OPERATING CONDITIONS

RATED ENVIRONMENT = INDOOR USE ONLY  
RELATIVE HUMIDITY = < 80% NON-CONDENSING

## REMOTE SOFTWARE SUPPORT

WINDOWS BASED CONTROLS ALLOW REMOTE SUPPORT AND  
VIEWING FOR CUSTOM WITNESS TESTS.

## MECHANICAL

EMI SHIELDED ENCLOSURES  
POWDER COAT FINISH  
ARC RESISTANCE ELECTRODES  
EXTREMELY RUGGED CONSTRUCTION

## SUPPLIERS

THE IG STRUCTURE, CHARGING SUPPLY, HIGH ENERGY CAPACITORS, SPHERE GAP DRIVE, IG RESISTORS, IMPULSE VOLTAGE DIVIDER, POWER CONDITIONING SECTION, CONTROLS, AND IMPULSE MEASUREMENT SYSTEM ARE MANUFACTURED USING MATERIALS PURCHASED FROM USA SUPPLIERS AND DISTRIBUTORS SUCH AS ALLEN BRADLEY, NATIONAL INSTRUMENTS, MCMaster-CARR, ALLIED ELECTRONICS, GRAINGER, AND NEWARK ELECTRONICS.

## JMX HIGH VOLTAGE

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