

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 Ω
100MHZ BANDWIDTH
12-BIT RESOLUTION
128K RECORD LENGTH
 $\pm 1\%$ ACCURACY

200MHZ DIGITIZER

2 CHANNEL
INPUT IMPEDANCE: 1M Ω
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 Ω || 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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