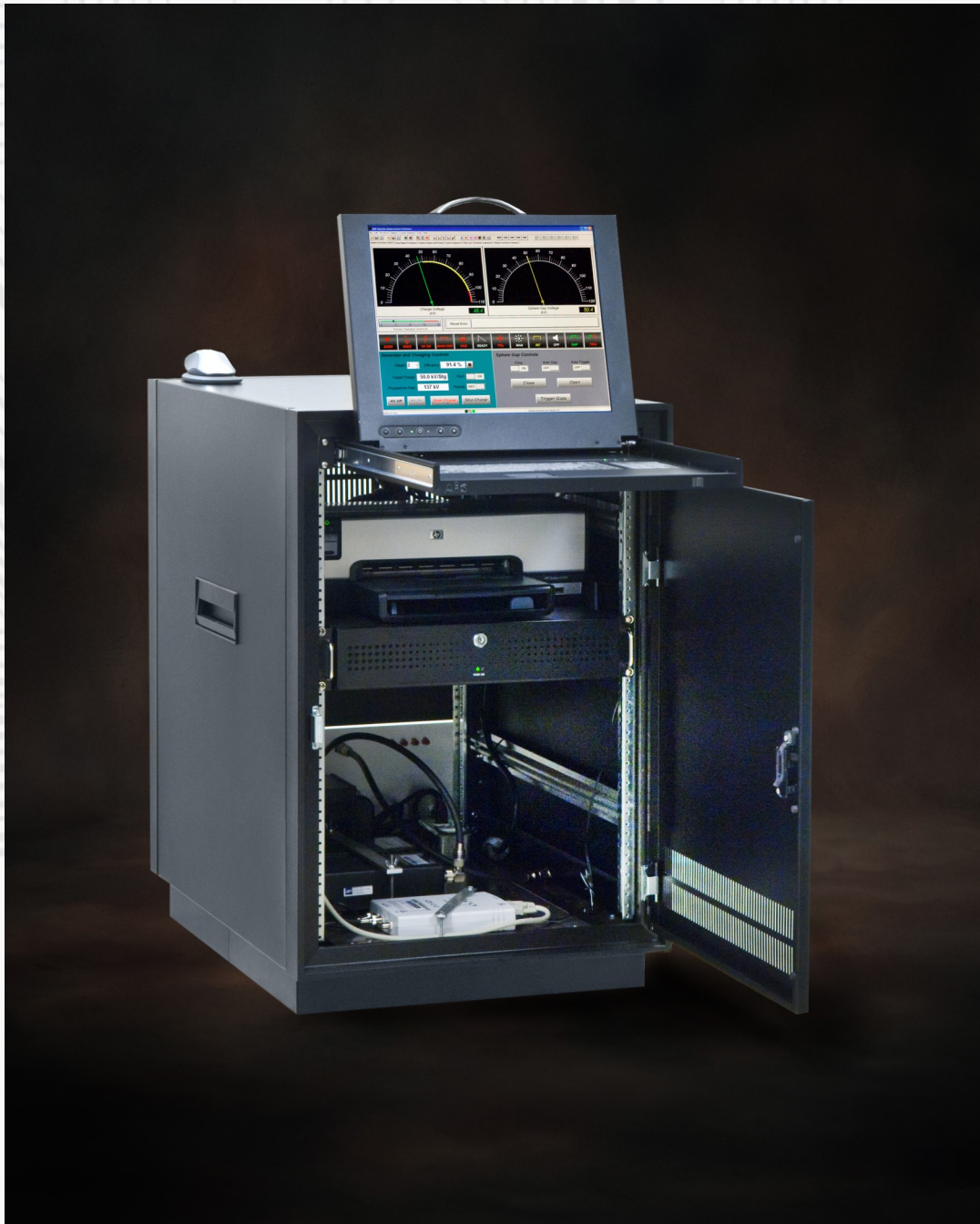


IMS-2024 IMPULSE MEASUREMENT SYSTEM

DIGITAL MEASUREMENT SYSTEM DESIGNED TO
ANALYZE VOLTAGE AND CURRENT IMPULSES WITH EASE



REVISED: 02/14/2024

GENERATOR CONTROL

Easy to Read Display of Generator Charge Condition

Analog and Digital Indication of Sphere Gap and Charge Settings

Displays Generator Alarm/Status Indicators

Indicates Custom Generator Control and Interlock Status

Calculates Target Charge from Previous Generator Efficiency

Allows for Manual Control of Generator Gaps and Trigger

DIGITIZER SETUP/CONTROL

Custom Sequences Allow for Automation of Setup and Control

Easy Selection of Waveform Type

Simple Entry of Target Voltage Automatically Sets Digitizer for Acquisition

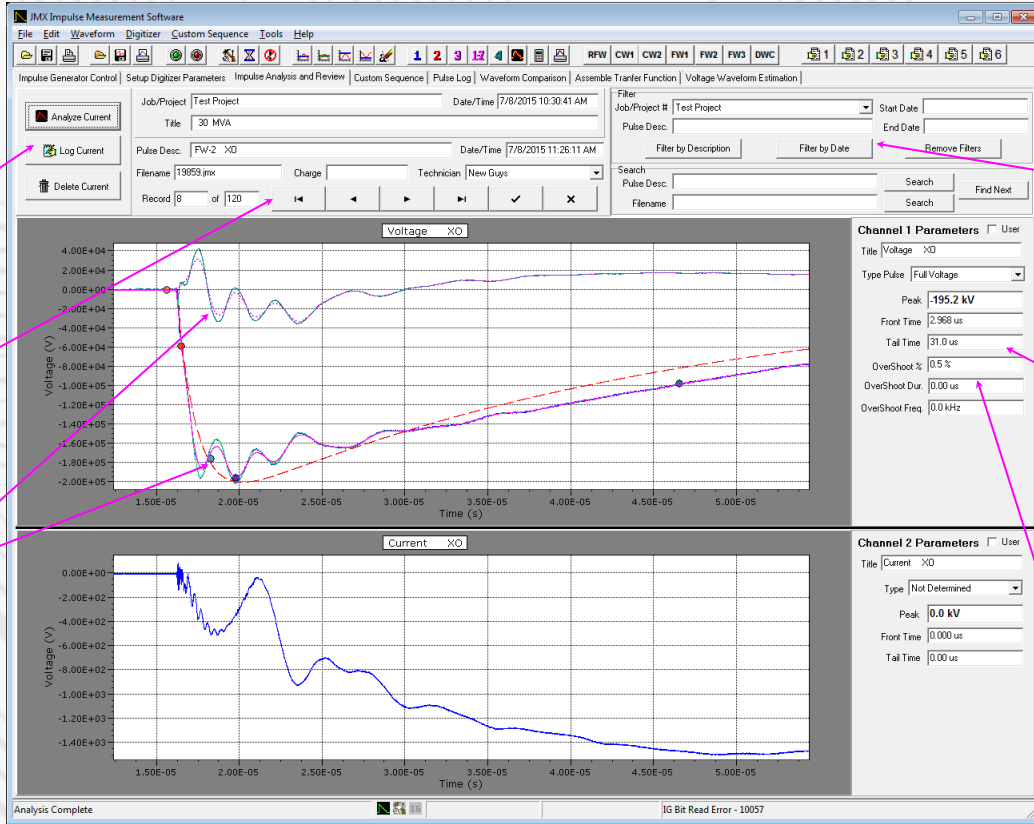
Allows Manual Adjustment of Trigger Settings

Allows For Manual Control of Digitizer

Displays Actual Sample Trigger Level



WAVEFORM ANALYSIS



Logs Pulse to Pulse Log Record of Peaks and Time Parameters

Easily Navigates to Previous and Current Pulses

Displays Intermediate K-Factor Waveforms and Critical Points Used in Parameter Calculations

Search and Filter Database for Desired Pulses

Databases Waveform Parameters

Displays Overshoot and Other Parameters when Relevant

CUSTOM AUTOMATION AND PULSE LOG

The screenshot displays the JMX Impulse Measurement Software interface showing a custom automation sequence. The main workspace is a table with the following columns: Step, Instruction, Action, Channel, Description, Pulse Type, Peak (kV/kA), T1/Tr (us), and T2/Tc (us). The table contains a list of commands and actions, such as 'Enable Ch1', 'Setup Channel', 'Arm Digitizer', 'Acq Description', 'Wait For User', 'Log Current', 'TX RFW', 'Disable Ch2', 'H1 Current', 'H1 Voltage', 'Full Voltage', 'DW #1', 'H2 Voltage', 'H2 Current', and 'Connect to H2'. The table is scrollable, and the bottom of the screen shows a status bar with 'Waiting for Data' and 'JG Bit Write Error - 10057'.

Run, Pause, or Abort Custom Control Sequences

Custom Sequences Allow Automation of Data Handling and Control

Overlays and Compares Pulses

Allows for Custom Report Generation in 12 Formats

Pulse Log Records Sequence of Pulses

Easy Navigation and Control of Pulse Log

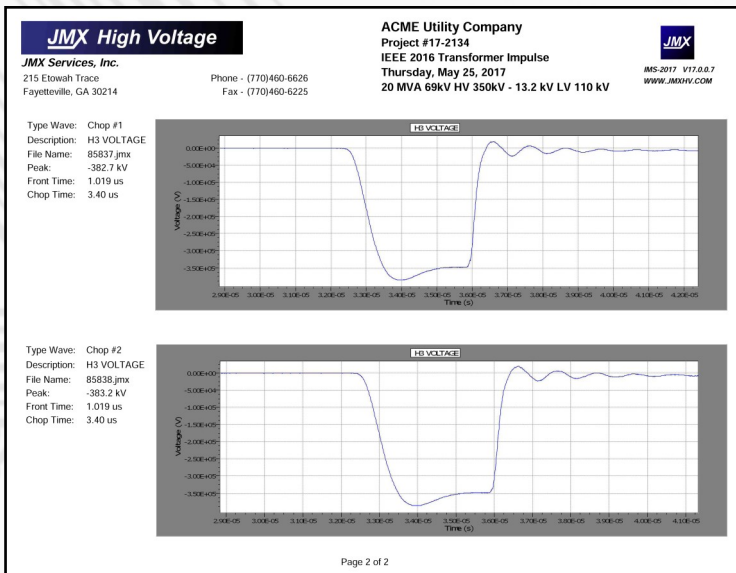
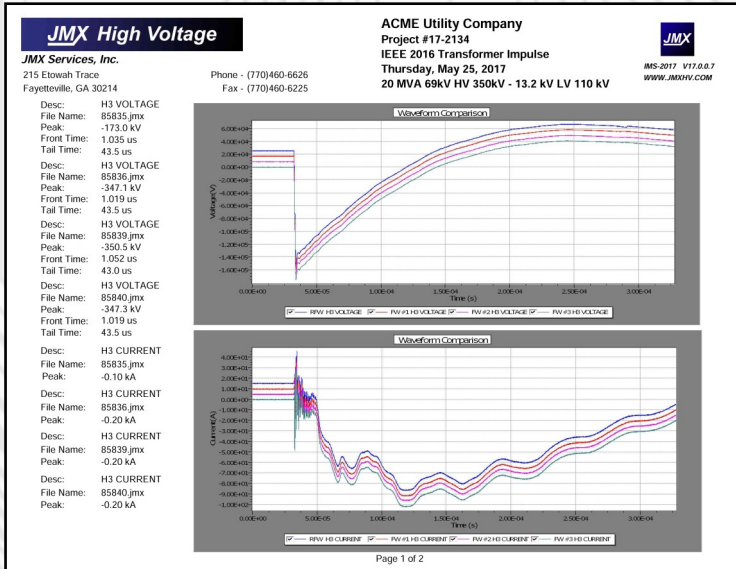


IMS-2024 VERSION ADDITIONAL FEATURES



Latest features in IMS-2024:

- Compliance with IEEE C57.13-2016 and IEEE C57.12.90-2015
- Multi-Project unload and re-load
- Automatic database repair/compact
- Four Channel Support (Optional)
- Full project report to .pdf
- Impulse Generator control and error messaging enhancements
- Overlay for multiple full waves
- Automatic vertical shift of comparison waveforms
- Hot-key viewing of critical points
- Custom report fields
- Larger parameter font size
- Multi-monitor support
- RS-232 remote control (Optional)
- Selectable graphical units (Eng./Sci.)



JMX High Voltage
JMX Services, Inc.
215 Etowah Trace
Fayetteville, GA 30214
Phone - (770)460-6626
Fax - (770)460-6225

ACME Utility Company
Project #17-2134
IEEE 2016 Transformer Impulse
Thursday, May 25, 2017
20 MVA 69KV HV 350KV - 13.2 kV LV 110 kV

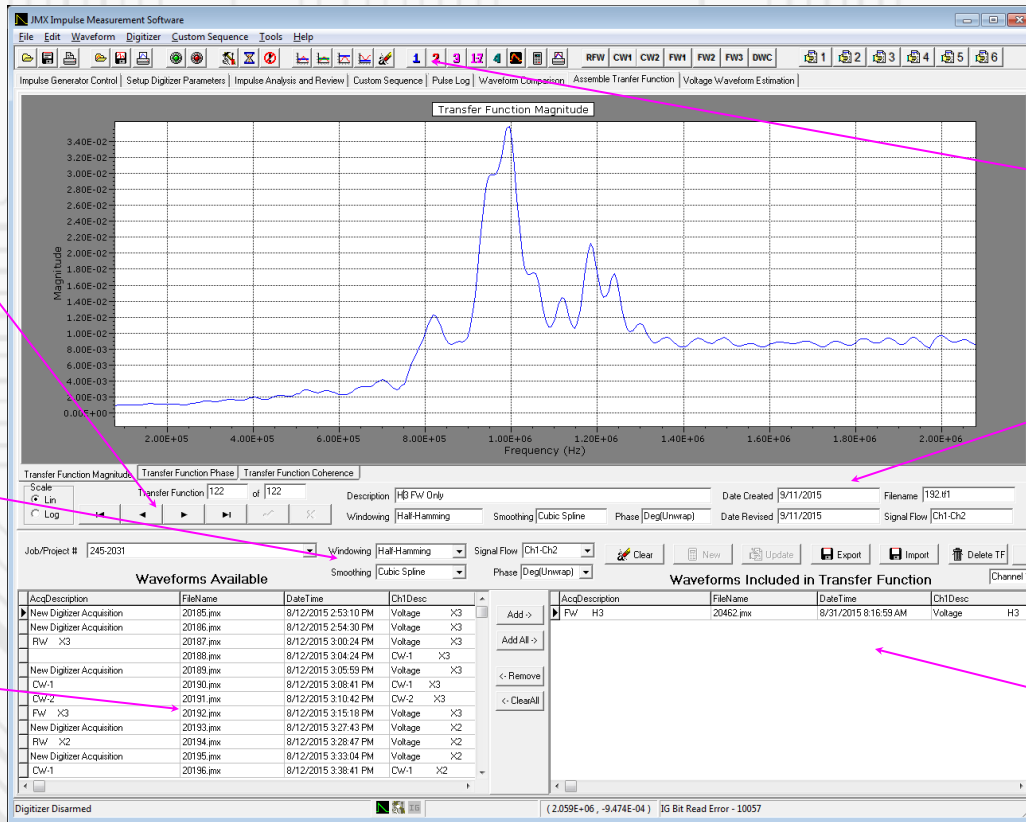
IMS-2017 V17.0.0.7
WWW.JMXHV.COM

Description	Filename	Chan Desc	Peak	T1/Tf	T2/Tc	Os%/Tps	Os Dur/Td	Os Freq/To	Date/Time	Charge
RFW	85835.jmx	H3 CURRENT	-0.18 kV	99.289 us	223.9 us				05/25/17 20:05:01	30 kV
RFW	85836.jmx	H3 VOLTAGE	-173.0 kV	1.035 us	43.5 us	5.1%	0.00 us	0.0 kHz	05/25/17 20:05:01	30 kV
FW #1	85836.jmx	H3 CURRENT	-0.20 kA	88.525 us	223.7 us				05/25/17 20:05:37	60 kV
FW #1	85836.jmx	H3 VOLTAGE	-351.8 kV	1.035 us	42.8 us	5.1%	1.23 us	101.1 kHz	05/25/17 20:05:37	60 kV
CW #1	85837.jmx	H3 VOLTAGE	-379.3 kV	1.002 us	3.39 us				05/25/17 20:06:15	66 kV
CW #2	85838.jmx	H3 VOLTAGE	-379.9 kV	1.002 us	3.39 us				05/25/17 20:06:48	66 kV
FW #2	85839.jmx	H3 CURRENT	-0.20 kA	88.425 us	224.7 us				05/25/17 20:07:25	60 kV
FW #2	85839.jmx	H3 VOLTAGE*	-350.5 kV	1.052 us	43.0 us	5.0%	0.00 us	0.0 kHz	05/25/17 20:07:25	60 kV
FW #3	85840.jmx	H3 CURRENT	-0.20 kA	88.475 us	224.0 us				05/25/17 20:08:01	60 kV
FW #3	85840.jmx	H3 VOLTAGE	-347.3 kV	1.019 us	43.5 us				05/25/17 20:08:01	60 kV

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EMAIL: SALES@JMXHV.COM WEB: WWW.JMXHV.COM



TRANSFER FUNCTION ANALYSIS



Navigates Transfer Functions and Displays

Overlays and Compares Transfer Functions

Selects Windowing and Smoothing

Databases Transfer Function Parameters

Computes Spectral Density Based Transfer Functions from Multiple Acquisitions

Displays All Waveforms Included in Transfer Function Estimate

SYSTEM SPECIFICATIONS

250MHZ DIGITIZER

2 CHANNEL
 INPUT IMPEDANCE: 1MΩ
 100MHZ BANDWIDTH
 12-BIT RESOLUTION
 128K RECORD LENGTH
 ± 1% ACCURACY

200MHZ DIGITIZER

2 CHANNEL
 INPUT IMPEDANCE: 1MΩ
 150MHZ BANDWIDTH, 75DB DR
 12-BIT RESOLUTION
 256K RECORD LENGTH
 ±0.5% ACCURACY

ATTENUATORS

RATIO: 50:1, 150:1, 200:1
 INPUT IMPEDANCE: 2MΩ || 20PF
 MAX. VOLTAGE: 2500 V PEAK
 ACCURACY: ±0.5%

GENERATOR CONTROL

CUSTOM CONTROLS AVAILABLE FOR EXISTING IMPULSE GENERATORS

INTERFACES PLC BASED CONTROLS VIA FIBER OPTIC LINK

REMOTE SOFTWARE SUPPORT

WITH INTERNET ACCESS WINDOWS SOFTWARE ALLOWS REMOTE SUPPORT AND USE OF APPLICATIONS FOR REMOTE TEST WITNESSES.

OPERATING CONDITIONS

SUPPLY VOLTAGE: 100/115/230 V TEMP. RANGE: 10°-35°C

MECHANICAL

EMI SHIELDED ENCLOSURE
 DIMENSIONS: (WxHxD)22"x34"x33"
 REDUCED MOBILE IMS2 FORM-FACTOR ALSO AVAILABLE

STANDARDS

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

JMX HIGH VOLTAGE

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