



Quality Surge Testers - Worldwide

PJ High Frequency Surge Testers 10KV to 50KV CONSOLES

<http://www.pjelectronics.com/pjconsole2.html>

MODEL NUMBER	APPROX. WEIGHT	DIMENSIONS H" x W" x D"	POWER INPUT (Volt Amps)	PEAK VOLTAGE OUTPUT	PEAK CURRENT OUTPUT
C10, TC10 HC10, MC10	285 lbs	49"x21"x22"	720 VA	10,000 V	300 amps
C12, TC12 HC12, MC12	290 lbs	49"x21"x22"	840 VA	12,000 V	375 amps
C15, TC15 HC15, MC15	295 lbs	49"x21"x22"	1080 VA	15,000 V	500 amps
C20, TC20 HC20, MC20	305 lbs	49"x21"x22"	1440 VA	20,000 V	700 amps
C25, TC25 HC25, MC25	345 lbs	49"x21"x22"	1800 VA	25,000 V	800 amps
C30, TC30 HC30, MC30	360 lbs	49"x21"x22"	2160 VA	30,000 V	900 amps
C35	380 lbs	49"x21"x22"	2400 VA	35,000 V	1050 amps
HC35	390 lbs	56"x21"x25"	2400 VA	35,000 V	1050 amps
C40	395 lbs	49"x21"x22"	2640 VA	40,000 V	1200 amps
HC40	405 lbs	56"x21"x25"	2640 VA	40,000 V	1200 amps
C50-2M*	415 lbs	49"x21"x22"	3000 VA	50,000 V	1600 amps
HC50-2M*	425 lbs	56"x21"x25"	3000 VA	50,000 V	1600 amps

NOTE: ALL CONSOLE, Portable and Bench Models :

- supplied with complete set of Instruction / Service manuals.
- come with a Certificate of Calibration traceable to NIST.
- meet IEEE's Standard 522-1992 voltage rise time specification of 0.1 μ sec.
- supplied with a Tektronix Digital Oscilloscope with Software and a USB Flash Drive.
- have a pulse rate of 50/60 pulses per second (pulse rate predicated on the line frequency).
- have a ground detector indicator to assure operator safety (120 Volt only).
- include a foot switch safety interlock.
- equipped to operate at 120VAC, 50/60Hz., single phase (except for 50KV models).
- capable of testing extremely low inductances (armatures, fields, etc.).
- capable of testing Fully Assembled Motors without rotating the Rotor.
- have dual waveform presentation: resonant current waveforms & resonant voltage waveforms.
- equipped with a digital voltage output panel meter.
- warranted against defective materials and workmanship for one year with lifetime technical support!

DC HI-POT SPECIFICATIONS				
MODEL NUMBER	MAXIMUM OUTPUT VOLTAGE	MAXIMUM OUTPUT CURRENT	HI-POT OVERCURRENT TRIP	CURRENT RESOLUTION
HC10, MC10	10 KV	2000 μ amps	2000 μ amps	0.1 / 1 micro amps
HC12, MC12	12 KV	2000 μ amps	2000 μ amps	0.1 / 1 micro amps
HC15, MC15	15 KV	2000 μ amps	2000 μ amps	0.1 / 1 micro amps
HC20, MC20	20 KV	2000 μ amps	2000 μ amps	0.1 / 1 micro amps
HC25, MC25	25 KV	2000 μ amps	2000 μ amps	0.1 / 1 micro amps
HC30, MC30	30 KV	2000 μ amps	2000 μ amps	0.1 / 1 micro amps
HC35	35 KV	2000 μ amps	2000 μ amps	0.1 / 1 micro amps
HC40	40 KV	2000 μ amps	2000 μ amps	0.1 / 1 micro amps
HC50-2M*	45 KV	2000 μ amps	2000 μ amps	0.1 / 1 micro amps

220-240 operating line voltage is available upon request and for an additional cost. Please add the following designation, "-2M", after the model number for PJ Surge Testers designed to operate from 220-240 operating line voltage. *50KV models (C50 and HC50) only available in 220-240VAC. Therefore, the C50 and HC50 models are identified as Model C50-2M and Model HC50-2M.

For the complete list of standard features on all Models, please link to our [Price List](#) page.

"C" Model: (Surge Console Models) These Digital High Frequency Surge Testers are the ultimate in ruggedness & durability. Fourteen / sixteen gauge steel construction and mobility on 6" heavy duty rubber wheels makes it a favorite for use in harsh industrial environments. The performance of PJ's exclusive/unique High Frequency Technology is capable of testing the integrity of any turn-to-turn insulation, including low inductance windings. **All Console testers** come standard with dual waveform display presentations: (1) Resonant Current Waveforms for Surge Testing "coil-to-coil" and low impedance windings (2) Resonant Voltage Waveforms for Surge Testing all types of multi-phase winding insulation systems including the surge testing of Fully Assembled Motors without moving the rotor. The internal components in these consoles are excessively over designed, just like the ones that were built in the early 1970's (which are still operating today). (Model C40 shown on right) **"C50-2M":** (50KV Console Model) The 50KV Digital P J High Frequency Surge Tester is the most powerful tester in a class of its own. No other manufacturer's 50KV Surge Tester can pulse/resonate 60 pulses per second at a risetime of 100 nano seconds. This powerhouse is equipped with a Tektronix TDS2002B Digital **colored** oscilloscope.



"TC" Model: (Surge with 3 Phase Transfer Switch Consoles) Although all PJ Surge Testers are capable of testing 3 Phase Motors, this "TC" Model has the same characteristics as the "C" Model, but includes a Built-in 3 Phase Test Selector Switch that facilitates 3 phase motor testing by mechanically re-positioning the ground terminal. (The operator does not have to physically re-position the surge tester leads once applied to the motor). This provides the operator with a quick identification of the defective phase when a fault is uncovered. The "TC" Model is perfect for the production line or high volume three phase motor testing. (TC Model shown on left)



"HC" Model: (Surge / DC Hi-Pot Consoles) The "HC" Model offers Surge / DC Hi-Pot testing capabilities! The "HC" Model has all of the features of our "C" Model plus a DC Hi-Pot Tester. DC Hi-Pot includes dual LED panel meters that display direct read out of current and voltage, with overcurrent safety trip and the capability of ascertaining Polarization Index (PI) Test results. This dual tester combo is still capable of testing 3 phase motors with or without rotors. However, the operator must re-position test leads applied to motor. (example photo of our Models HC10 through HC40 shown on right) **"HC50-2M":** (50KV Surge / DC Hi-Pot Console Model), it has all of the features described above plus the features of the "C50-2M"!



"MC" Model: (Multi Operational Surge Tester (**MOST**) Consoles) The "MC" Model has the same characteristics as the "C" Model plus features from the "TC" and "HC" models. We enhanced our one of a kind tester to now offer a Digital Surge, DC Hi-Pot & Built-In 3 Phase Test Selector Switch *all-in-one* versatile Tester. The DC Hi-Pot tester has separate panel meters for direct readout (voltage and current) so that no interpretation on the scope's display is ever needed and enables one to ascertain Polarization Index (PI) Test results. When you use the built-in 3 phase selector switch for multi-phase motor testing, you have the confidence that all windings tested have been effectively stressed with PJ's exclusive High Frequency Technology. Add an optional milli-ohm resistance meter for Resistance Testing and upgrade to a color oscilloscope to further enhance this **Multi Operational Surge Tester (MOST)**. (MC Model shown on left)