

Precision Tester Line Comparison Chart

Tester Parameter	Premier	MultiFerroic	LC	RT66B	FH	FH100V	SC
Voltage Range (no external amp)	±200V	±200V	±200V	±10V	±10V	±100V	±10V
Voltage Range external amplifier	10kV	10kV	10kV	10kV	N/A	N/A	N/A
Number of ADC Bits	18	18	16	14	14	14	16
Minimum Charge Resolution	0.80fC	0.80fC	30.5fC	122fC	122fC	122fC	3.05fC
Minimum Area Resolution (assuming 1 ADC bit = 1µC/cm ²)	0.080µ ²	0.080µ ²	3.05µ ²	12.2µ ²	5µ ²	12.2µ ²	0.305µ ²
Maximum Charge Resolution	5.26mC	5.26mC	58µC	4.8µC	47.5nC	47.5nC	10nC
Maximum Area Resolution (assuming saturation polarization = 100µC/cm ²)	52.6cm ²	52.6cm ²	0.58cm ²	4.8mm ²	10,000µ ²	10,000µ ²	100µ ²
Max Charge Resolution w/HVI	526mC	526mC	5.8mC	480µC	N/A	N/A	N/A
Maximum Area Resolution (assuming saturation polarization = 100µC/cm ²)	>100cm ²	>100cm ²	58cm ²	4.8cm ²	N/A	N/A	N/A
Maximum Hysteresis Frequency	100KHZ @9.9V 5KHZ @200V 10KHz @100V	100KHZ @9.9V 30KHZ @200V 50KHZ @100V	2kHz	0.2kHz	1MHz	200kHz	250Hz
Minimum Hysteresis Frequency	0.03Hz	0.03Hz	0.1Hz	0.125Hz	100Hz	100Hz	0.1Hz
Min Pulse Width	0.5µs	0.5µs	50µs	500µs	40ns	10µs	50µs
Minimum Pulse Rise Time (5V)	400ns	400ns	40µs	500µs	20ns	3µs	40µs
Max Pulse Width	1s	1s	1s	100ms	10ms	10ms	1s
Max Delay between Pulses	40ks	40ks	40ks	40ks	40ks	40ks	40ks
Internal Clock	25ns	25ns	1µs	50µs	5ns	5ns	1µs
Minimum Leakage Current (assuming max current integration period = 20 seconds)	<1pA	<1pA	<1pA	10pA	100nA	100nA	100fA
Maximum Small Signal Cap Frequency	1MHz	1MHz	20kHz	2kHz	25MHz	100kHz	20kHz
Minimum Small Signal Cap Fequency	1Hz	1Hz	1Hz	10Hz	100Hz	100Hz	1Hz
Output Rise Time Control	10 ⁵ scaling	10 ⁵ scaling	125KV/s fixed	2 settings	None	None	125KV/s fixed
Input Capacitance	~60fF	~60fF	1.5pF	1pF	~1pF	~1pF	0.1pF
Electrometer Input	Yes	Yes	Yes	Yes	Yes	Yes	Yes

* The minimum area resolution under actual test conditions depends upon the internal noise environment of the tester, the external noise environment, and the test jig parasitic capacitance.

*** Tester specifications are subject to change without notice