

| INPUT SPECIFICATIONS | |
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| Voltage | 115/130 VAC ± 10%, Single Phase, User Selection |
| Frequency | 50/60 Hz ± 5% |
| Fuse | 6.3 A, 250 V Slow Blow |
| DIELECTRIC WITHSTAND TEST MODE | |
| Output Rating | 7705: 10 kV @ 20 mAAC 7710: 12 kV @ 10 mADC 7715: 20 kV @ 10 mAAC 7720: 20 kV @ 5 mADC |
| HI-Limit and LO-Limit | 7705 Range 1: 0.0 – 9,999 mA Resolution: 0.001 mA Range 2: 10.00 – 20.00 mA Resolution: 0.01 mA |
| | 7710 Range 1: 0.00 – 999.9 µA Resolution: 0.1 µA Range 2: 1,000 – 9,999 µA Resolution: 1 µA |
| | 7715 Range: 0.00 – 9,999 mA Resolution: 0.001 mA |
| | 7720 Range 1: 0.0 – 999.9 µA Resolution: 0.1 µA Range 2: 1,000 – 5,000 µA Resolution: 1 µA/step |
| | 77XX Accuracy: ± (2% of setting + 2 counts) |
| DC Ramp HI | 7710 13 mA peak maximum, 10 mADC, ON/OFF selectable |
| | 7720 6.75 mA peak maximum, 5 mADC, ON/OFF selectable |
| DC Charge LO | 7710/7720 Range: 0.0 – 350 µADC or auto set |
| Arc Detection | 7705 1 – 9 at output voltage < 7.00 kV 1 – 8 at output voltage ≥ 7.00 kV |
| | 7710/7720 1 – 9 |
| | 7715 1 – 9 at output voltage < 15.00 kV 1 – 7 at output voltage ≥ 15.00 kV |
| Voltage Display | 7705 Range: 0.00 – 10.00 kV Full scale Accuracy: ± (2% of reading + 20 V) |
| | 7710 Range: 0.00 – 12.00 kV Full scale Accuracy: ± (2% of reading + 20 V) |
| | 7715/7720 Range: 0.00 – 20.00 kV Full scale Accuracy: ± (2% of reading + 20 V) |
| Current Display | 7705 Auto Range Range 1: 0.000 – 3.500 mA Range 2: 3.00 – 20.00 mA |
| | 7710 Auto Range Range 1: 0.0 – 350.0 µA Range 2: 300 – 3500 µA Range 3: 3,000 – 9,999 µA |
| | 7715 Auto Range Range 1: 0.000 – 3.500 mA Range 2: 3.00 – 10.00 mA |
| | 7720 Auto Range Range 1: 0.0 – 350.0 µA Range 2: 300 – 5,000 µA |
| DC Output Ripple | 7710 < 5% Ripple at 12 kV @ 9,999 µA, Resistive Load |
| | 7720 < 5% Ripple at 20 kV @ 4,999 µA, Resistive Load |
| AC Output Waveform | Sine Wave, Crest Factor = 1.3 – 1.5 |
| Output Frequency | Range: 50/60 Hz, User Selection ± (1% of output + 5 V) from Regulation No load to full load |
| Output Regulation | ± (1% of output + 10 V) from no load to full load |
| Discharge Timer | 7710 No load < 400 ms |
| | 7720 No load < 500 ms |
| Dwell Timer | Range: 0, 0.3 – 999.9 sec (0=Continuous) AC Range: 0, 0.3 – 999.9 sec or min (0=Continuous) DC Range: 0, 0.4 – 999.9 sec or min (0=Continuous) |
| Ramp Timer | 7705/7715 Range: 0.3 – 999.9 sec |
| | 7710/7720 Range: 0.4 – 999.9 sec |
| Ground Continuity | Max. Ground Resistance 1 Ω ± 0.1 Ω, fixed |

| DIELECTRIC WITHSTAND TEST MODE | |
|--------------------------------|--|
| Ground Fault Interrupt | HV Shut Down Speed < 1 ms GFI Trip Current 1 mA max |
| GENERAL SPECIFICATIONS | |
| Memory | 50 memories w/ 8 steps per memory |
| Mechanical | Tilt-up front feet |
| Interface | Standard: USB, RS-232 Optional: GPIB |
| Dimensions (W x H x D) | 16.93" x 5.24" x 15.75" (430 x 133 x 400 mm) |
| Weight | 7705/7710: 61.65 lbs (28 kg) |
| | 7710/7720: 48.9 lbs (22 kg) |

Why We Use Counts

Associated Research publishes some specifications using "counts" which allows us to provide a better indication of the instrument's capabilities across measurement ranges. A count refers to the lowest resolution of the display for a given measurement range. For example, if the resolution for voltage is 1V then 2 counts = 2 V.

Specifications subject to change without notice.