



# VLF Cable Testing for cables rated to 20 kV

## VLF-30CM(F)

### Features and Benefits

The High Voltage, Inc. VLF-30CM is one of the smallest and lightest VLF ac hipots available. HVI introduced sine wave VLF technology in 1997. This model has been in field use since 2002 and has proven to be a very durable design. Economical and easy to use, it is perfect for withstand tests on shielded power cables per IEEE400.2-2013. The VLF-30CM is our basic unit, for advanced features such as remote operation, programming, professional reports, and solid state menu-driven technology see our VLF-34E.

### Specifications

<b>Input</b>	120 volts, 60 Hz, 5 A peak, 2.5 A average (F) 230 V, 50/60 Hz, 2.5 A peak, 1.5 A average
<b>HV output</b>	Sinusoidal 0 - 30 kVac peak @ 0.1 Hz
<b>Load rating</b>	0.4 $\mu$ F maximum load capacitance at any voltage
<b>Duty cycle</b>	Continuous at 0.4 $\mu$ F load rating up to 30 kVac peak
<b>Volt meter</b>	3.5" Analog center zero: -30 kVac peak - 0 - +30 kVac peak
<b>Current meter</b>	3.5" Analog: 0 - 50 mAac peak Charging Current
<b>Output cable</b>	20'/6 m RG 8/U with battery clamp termination
<b>Size / weight</b>	15" w x 11.5" d x 22" h, 82 lbs. (F) 88 lbs. 381 x 292 x 559 mm, 37 kg. (F) 40 kg



VLF Tan Delta  
VLF Partial Discharge  
also available.



Controls are easy and reliable.

IEEE 400.2-2013 Test Voltages for Sinusoidal VLF				Cable Lengths = 0.4 $\mu$ F	
Cable Rating (phase to phase)	Installation (phase to grd)	Acceptance (phase to grd)	Maintenance (phase to grd)	Approx. cable lengths = 0.4 $\mu$ F	
kV rms	kV peak	kV peak	kV peak	500 mcm	1000 mcm
5	13	14	10	2300'/700m	1500'/460m
8	16	18	14	2600'/790m	2100'/640m
15	27	30	22	4000'/1220m	3000'/910m
20	34	37	28	4300'/1310m	3500'/1070m

Test duration should be 30 – 60 minutes at the above voltages.

**Model voltage rating:** The VLF-30CM(F) meets the voltage changes implemented in IEEE-400.2-2013 standard, where the VLF Acceptance test voltage for 15 kV cable is now 30 kVac peak, increased from 28 kVac. The VLF-30CM(F) can also Maintenance test 20 kV cable at the 28 kVac peak requirement of the standard.



**Solid State Design Alternative**  
Model VLF-34E with TD-34E  
0-34 kVac @ 0.1 - 0.01 Hz  
@ 0.5  $\mu$ F - 8.0  $\mu$ F