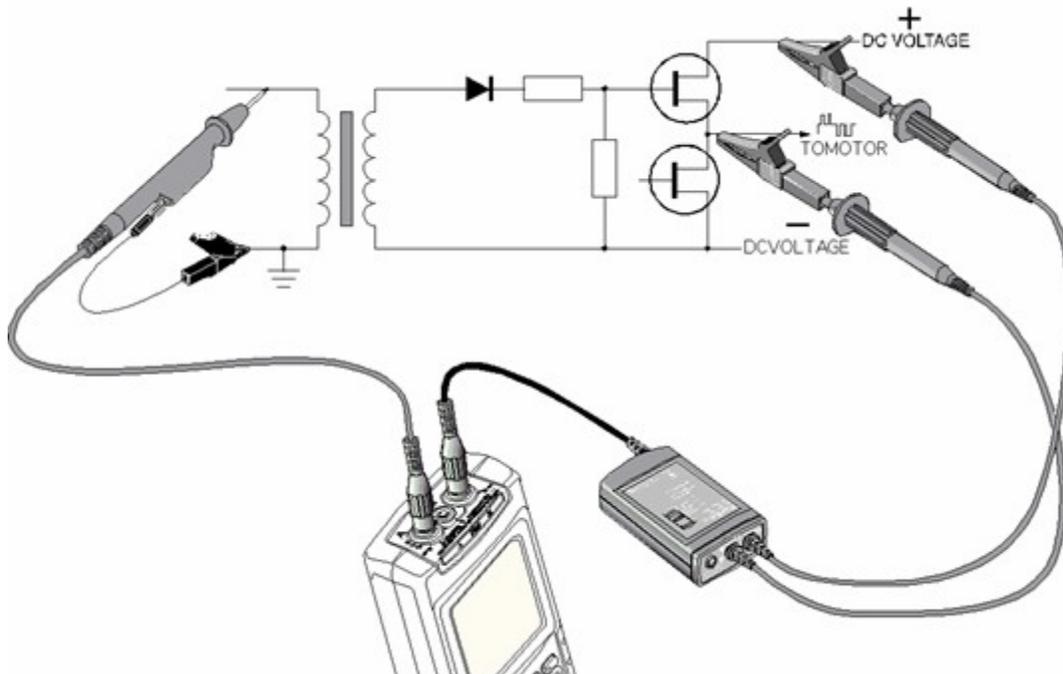


### Features:

- ✓ Allows user to safely make floating high voltage measurements while using general purpose oscilloscopes.
- ✓ Maximum differential voltage up to 1000V.
- ✓ Differential amplifier converts and scales floating input signal to a low-voltage signal referenced to earth ground.
- ✓ The probe can be used on circuits associated with electronic high-power converters, motor speed controllers, switching power supplies, and other high voltage circuits requiring isolation.
- ✓ Switchable attenuation settings.
- ✓ High impedance to ground for both positive and negative sides of the balanced input.
- ✓ Input uses shrouded banana test probe tip.
- ✓ Probe tip accepts large alligator clips and pin-grabber test clips (included).
- ✓ The output to the oscilloscope is a BNC cable with a safety insulated BNC male connector.
- ✓ Optional Universal Power Adapter.



## Specifications:

### Input Characteristics

**Input Probe Tip Style:** Shrouded banana probe tip

**Probe Cable Length:** 1.5 meter (60 inch)

**⚠ Maximum Input Voltage to Ground:**

600V CAT III

1000V CAT II

*Installation Category III refers to distribution level and fixed installation circuits inside a building. Installation Category II refers to local level, which is applicable for appliances, and portable equipment.*

**⚠ Maximum Differential Input Voltage:**

1000 VDC, or

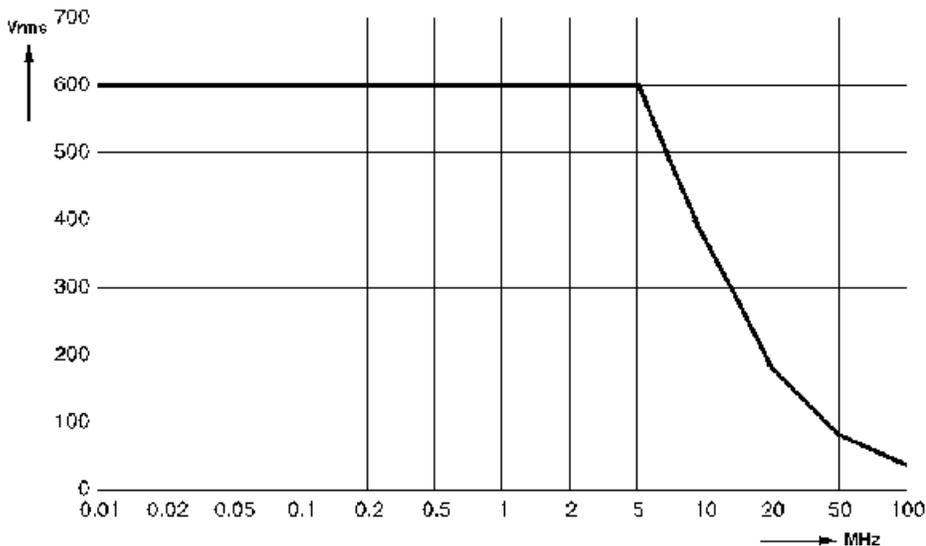
1000 Vrms, or

1200V (DC+AC peak)

*Note:*

*(DC+AC peak) limit is determined by the point at which the differential voltage probe starts clipping.*

For derating of each input probe (red or black), see figure below.



### Output Characteristics

**Output Cable:** Safety designed BNC cable

**Cable Length:** 0.5 meter (20 inch)

**Max. Output Voltage Range:**  $\pm 6.5V$  into  $1 M\Omega$

### Electrical Characteristics

**Attenuation:** 200x and 20x

**Bandwidth:** (into  $1 M\Omega$ ,  $50 pF$ )

200x: DC to 20 MHz (-3 dB)

20x: DC to 20 MHz (-3 dB)

**Accuracy:**  $\pm 2.5\%$  into  $1 M\Omega$

**Rise time:**

200x: 17.5 ns  
20x: 17.5 ns

**CMRR:**

200x: @60Hz= >80 dB, @1 MHz= >50 dB  
20x: @60Hz= >70 dB, @1 MHz= >40 dB

**Input Impedance:**

Between each input to shielding BNC: 5 M $\Omega$  , 6 pF  
Between the inputs: 10 M $\Omega$  , 5 pF

**Output Impedance:** 50 $\Omega$ **Noise:**

200x: <2 mVrms  
20x: <3 mVrms

**Offset:**  $\leq$ 10 mV into 1 M $\Omega$ **Switch positions:** OFF, 200x, 20x**Power****External:**

Via power adapter 6732 (optional)

**Internal:**

Battery Power: Alkaline 9V, IEC6LR61

*Battery life measured @ 25 °C with Duracell® alkaline battery. (Delivered with probe.)*

Battery Life: 8 hour operation  
400 hour in auto standby

**Power indicators:**

Green LED: ON at normal operation.  
Blinks in standby.

*Red LED: ON when battery needs to be replacing. (To change from standby to normal operation turn switch from OFF to 20x or 200x.)*

**Auto Stand By:**

After 30 minutes, only when battery operated

**Environmental****Meets requirements of:**

MIL-T-28800E, Type III, Class 3.

EN 50081-1, Electromagnetic Compatibility Generic Emission Standard: EN55022 and EN60555-2.

EN 50082-2, Electromagnetic Compatibility Generic Immunity Standard: IEC801-2, -3, -4, -5. (see also Tables 1 and 2)

This product is in conformity with Electromagnetic Compatibility Directive 89/336/EEC and Low Voltage Directive 73/23/EEC.

This conformity is indicated by the symbol  $\epsilon$ , i.e. "Conformité Européenne".

**Temperature:**

Operating: 0°C to +50°C (+32°F to +122°F)

Storage: -10°C to +60°C (+14°F to +140°F)

**Altitude:**

Operating: 3 km (9850 feet)

Storage: 12 km (40 000 feet)

#### **Safety Specifications**

##### **Meets requirements of:**

EN61010-2-31 (IEC1010-2-31).

##### **Compliant with:**

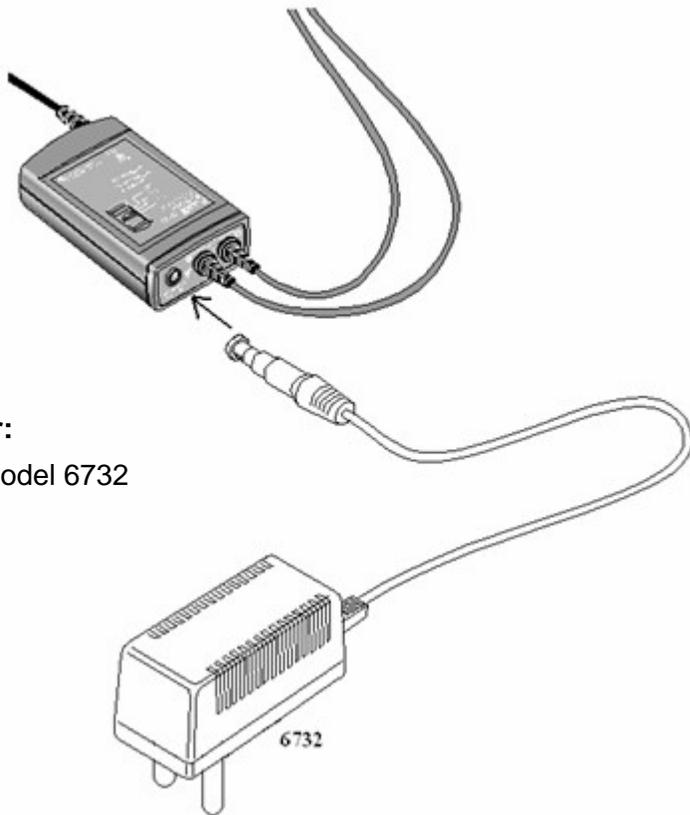
UL3111-1 (including listing)

CSA C22.2 No.1010.1-92 (including approval)

##### **Max. Floating Output Voltage:**

600V Category III, up to 400 Hz. (From shielding to ground)

The 6731 conforms with the EEC directive 89/336 for EMC immunity, as defined by IEC801-3, with the addition of the following tables.



#### **Optional power adapter:**

Universal 115V/230V: Model 6732