

## PowerBeam 300

### Long Range Detector Attachment For UL101 Ultrasound Sensor



**The PowerBeam 300 Was Designed To Test High Voltage Insulators And Transformers From A Safe Distance With A High Degree Of Accuracy**

The PowerBeam 300 continues CTRL System's history of taking the lead in pushing ultrasound technology to new levels. This UL101 add-on helps you to maintain safe distances from test areas. The parabolic design enhances the capabilities of the CTRL UL101 ultrasound sensor by increasing the effective detection distance to more than 300 feet.

Enhanced ultrasound detection is provided to the CTRL UL101 by combining the features of the already proven UL101 with extended range and sensing capabilities. A pistol-like grip laser pointer, and rifle sights make the PowerBeam 300 easy to handle and use.

#### **Detect ultrasound from 300 feet**

The PowerBeam 300 improves the distance of detection of the UL101 from about 150 feet to 300 feet. At the same time, the beam of reception is decreased from 5 degrees from center to 1 degree from center for better accuracy at the longer distances.

#### **Improve safety when testing for ultrasound**

The PowerBeam was originally designed to enhance the ability of the UL101 to test high voltage insulators and transformers for arcing and corona discharge safely. The UL101 and PowerBeam combination can also be used to test critical equipment from a safe area or locate leaks in ceilings without the use of a lift. You can improve your safety practices as well as locate potential hazards quickly.

#### **Find arcing and corona discharge**

You can indicate and locate the ultrasound produced by arcing and corona discharge easily using the UL101 and PowerBeam. In many cases, ultrasound is produced before heat. Therefore, you can implement a cost-effective routine monitoring program without purchasing high-priced infrared and corona cameras.



## Specifications

### Dimensions:

Dish Diameter: 13" (330 mm)  
Overall: 21" x 17" x 1.26"  
(533 x 432 x 32 mm)

### Weight:

45 oz (1.3 kg)  
(without UL101 receiver)

### Housing:

Extruded Aluminum

### Power Supply:

Two (2) Standard AAA Alkaline Batteries  
(for laser)

### Battery Life:

> 20 Hours

### Distance of Reception:

Up To 300 Feet

### Frequency Bandwidth:

1.8 – 2.2 kHz @ level 0.7 (or -3 dB)

### Working Resonance Frequency:

40 kHz +/- 1.5 kHz

### Operating Temperature Range:

-4° to +130° F (-20° to +54° C)

### Controls:

Laser Trigger On/Off Switch

### Warranty:

1-year parts & labor  
Extended warranty available

## Reasons To Consider PowerBeam 300

### Improves power transmission testing

You can increase the amount of electricity that reaches your customers and decrease power grid failure by using the PowerBeam to routinely monitor power transmission lines and transformers.

### Pinpoints leaks in high ceilings

Many organizations have instituted routine leak detection programs for energy savings. If you have ceilings that are more than 40 feet high, you should use the PowerBeam to locate the leaks within a few inches without climbing ladders or using lifts.

### Performs better

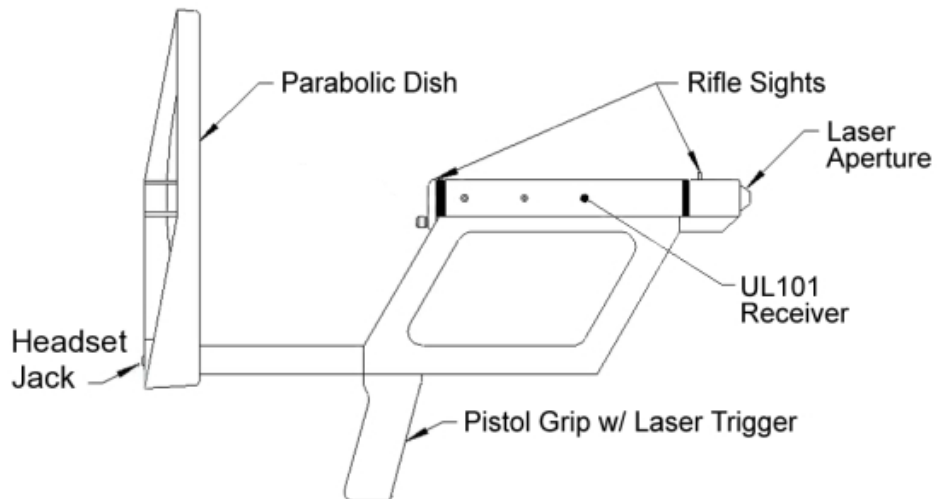
The PowerBeam and UL101 have been tested on numerous occasions along side competitive ultrasound receivers and parabolic attachments. The PowerBeam will detect ultrasound with better accuracy from greater distances than other devices.

### Certified for testing high voltage

The PowerBeam is gaining widespread approval throughout the world. For example, India's Certified R&D Institute certified the functional aspects of the UL101 with the PowerBeam for detection of corona discharge from 400 kV and 250 kV single suspension insulator strings.

## Key Product Features

- Pistol type detector with fixed frequency response range
- Detects ultrasound up to 300 feet
- Focus of detection is within 1 degree from center of source
- Laser pointer and rifle site for accurate pinpointing
- Extruded aluminum frame
- No calibration or special maintenance
- No recharging of batteries



PowerBeam 300 Diagram

The CTRL UL101 Receiver and Headset are required for use. Please contact CTRL Systems, Inc to request information on the CTRL UL101.



CTRL Systems, Inc.  
1004 Littlestown Pike, Suite H  
Westminster MD, 21157  
USA  
www.ctrlsys.com