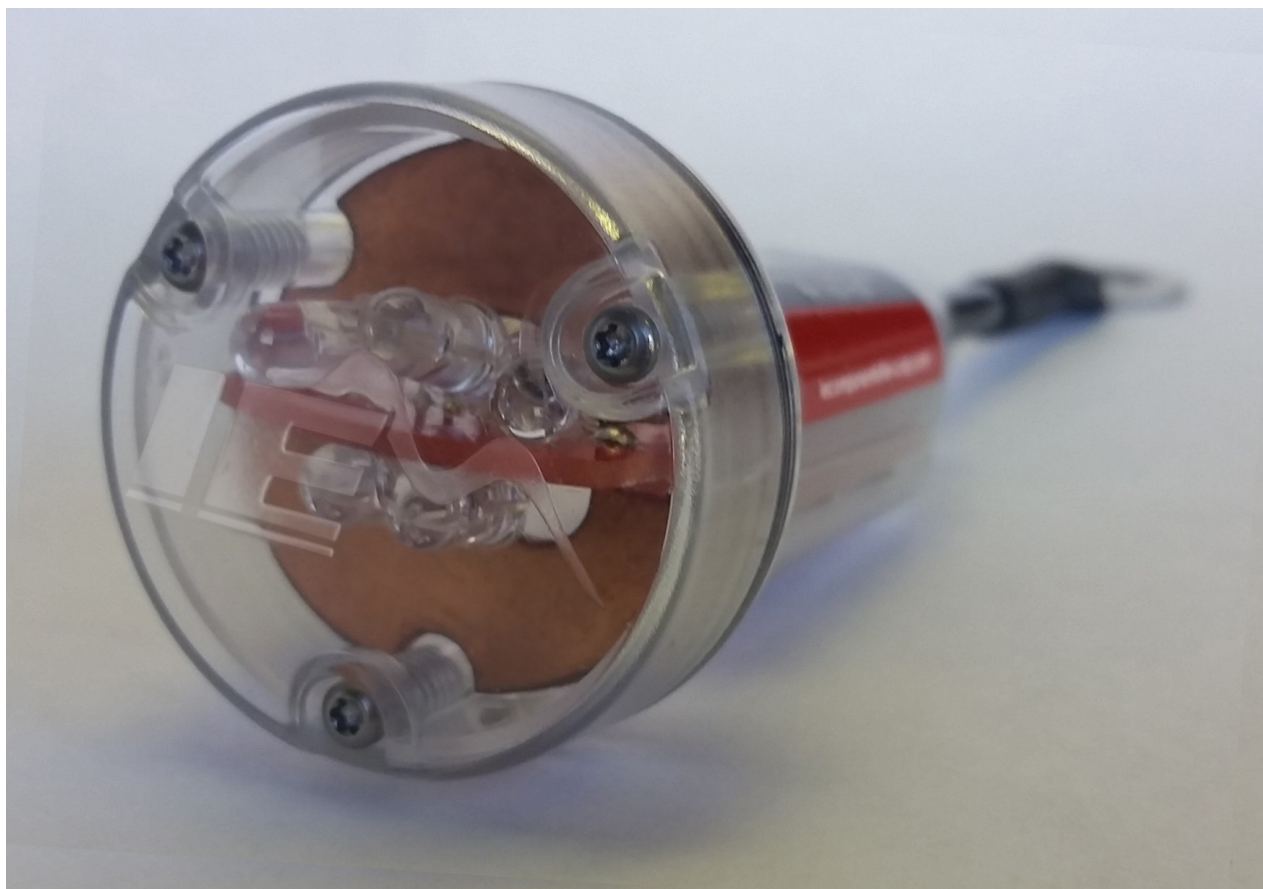




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IHV-2-1 / IHV-2-2
High Voltage Monitors
Part Numbers: 1100-9550 / 1100-9551



Patent Pending



The IHV-2 is not intended to be used as a sole indication that there is no voltage present. Make certain that power is removed using a separate visual disconnect switch (or equivalent) prior to performing tasks that may result in exposure to dangerous voltages.

IHV-2-1 / IHV-2-2 High Voltage Monitors

The IHV-2 high voltage monitors indicate when high voltages are present on a conductor, such as a voltage bus. The IHV-2 is mounted directly to the conductor being monitored, and there are no other necessary mechanical or electrical connections.

Indicators, visible through the clear housing of the IHV-2, flash when high voltages are present. The frequency of the flashes is a useful indication of the voltage level.

The IHV-2 is self powered, and no electrical connections are required, other than a 1/2" mounting bolt. Instead, the IHV-2 wirelessly draws operating current through a unique ground plate "antenna."

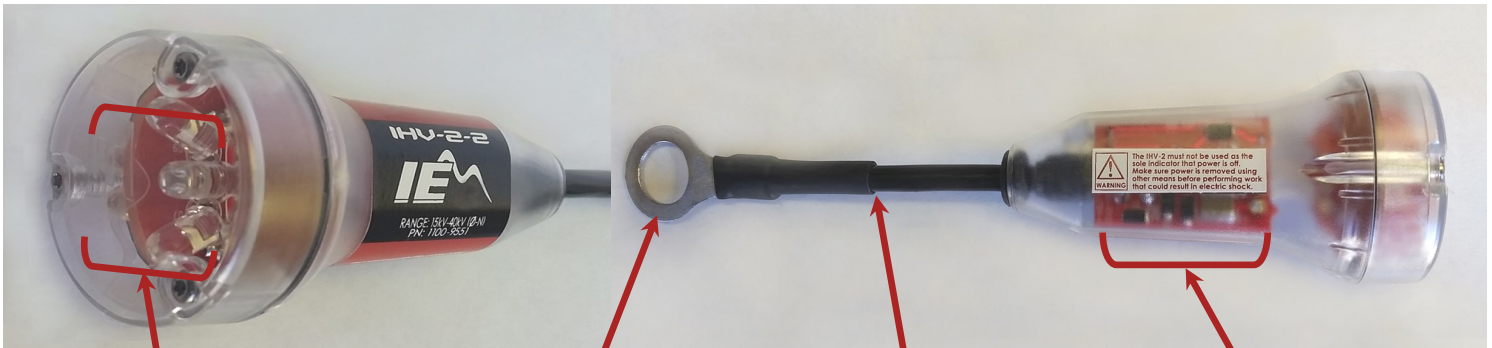
Two models are provided to cover a wide range of voltages. The IHV-2-1 is recommended for Phase-Neutral voltages from 2kV - 15kV, and the IHV-2-2 is designed for 15kV - 30kV.

Features & Specifications:

- Five bright Indicator lamps provide excellent visibility with a wide viewing angle through the front lens of the IHV-2. Additional indicators light the unit's clear housing to provide nearly 360° visibility.
- Indicator lamps flash to indicate presence of high voltages. Frequency of flashes increases with higher voltages, and vice versa.
- Semi-rigid "positioning Lead" is easily bent to position the indicator for optimum visibility, yet holds the unit securely in place.
- No electrical connections required, except for the 1/2" mounting bolt. Multiple IHV-2s can be used to monitor multiple phases.
- Easy to use: No controls, no connectors, no calibration.
- Self-powered—No power supply needed.
- Two models available to cover a wide voltage monitoring range:
 - IHV-2-1 (PN 1100-9550) for 2kV - 15kV
 - IHV-2-2 (PN 1100-9551) for 15kV - 40kV
- Negligible power consumption: Less than 50mW.

Installation Example:





<p><u>Five Front Indicators</u></p> <p>Flash rapidly at higher voltages, slowly at lower voltages. Five indicators positioned to increase viewing angle.</p>	<p><u>Mounting Terminal</u></p> <p>Provides mechanical mounting, as well as electrical connection to the bus being monitored.</p>	<p><u>Positioning Lead</u></p> <p>Semi-rigid cable is easily bent to position the indicator for optimum visibility, yet holds the unit securely in place.</p>	<p><u>Additional Indicators</u></p> <p>Flashing in sync with front indicators, these indicators illuminate the clear housing, providing nearly 360° visibility.</p>
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Operation:

IHV-2 monitors are an extremely simple and inexpensive way to improve safety in switchgear and power distribution systems.

Attaching an IHV-2 to a phase on a voltage bus provides an easy-to-see indication of whether that phase is powered or not. Other than a single 1/2" mounting bolt, there are no connections to make, and there are no controls or calibrations needed.

The IHV-2 senses the voltage of any conductor it is attached to, and it wirelessly draws energy through unique ground plates to flash LEDs when the conductor is energized.

When the voltage of the conductor is higher, more energy is available, so the indicators flash faster, and vice versa. The amount of energy also depends on geometry (proximity to other conductors and ground), so flash rates will vary depending on the design of the system.

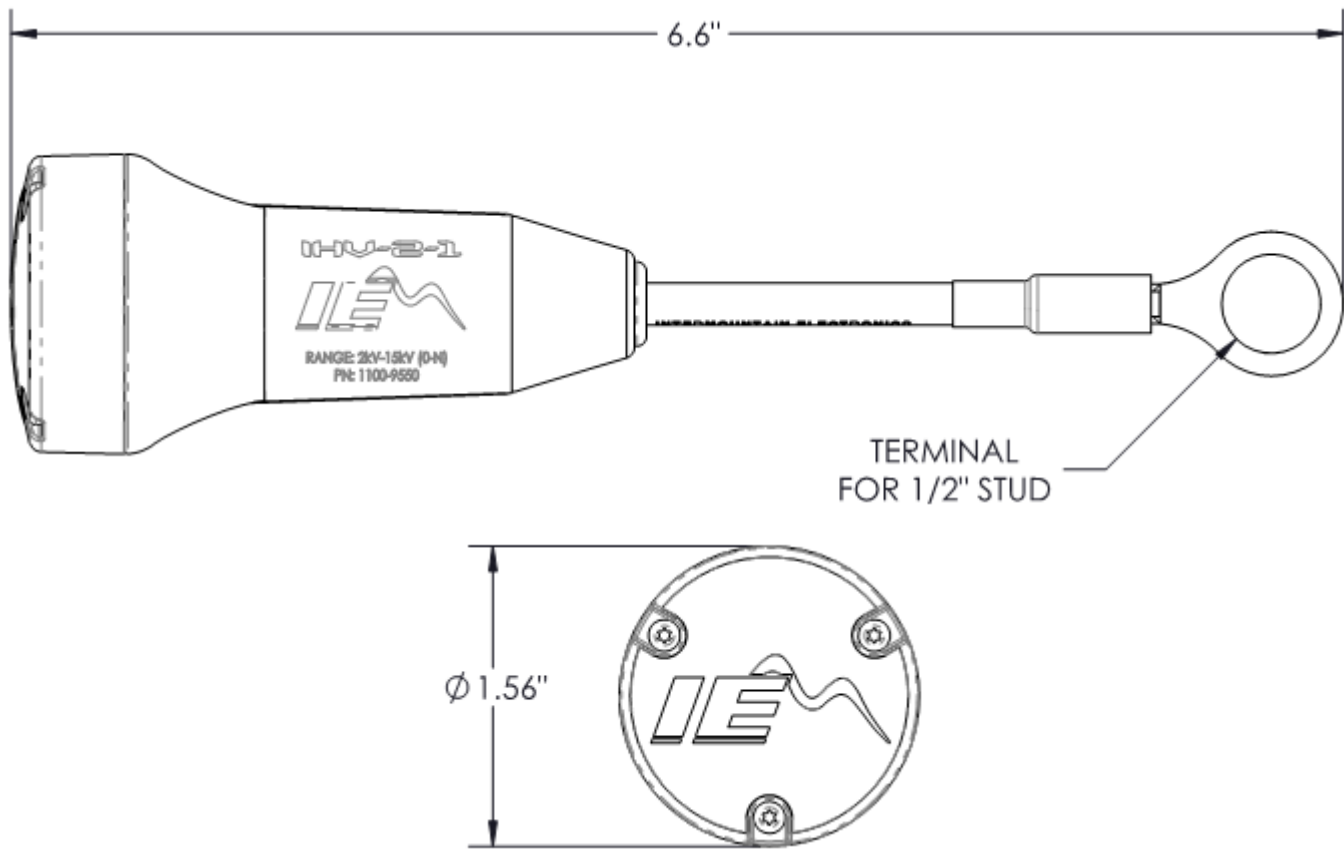
Geometries, and thus flash rates, vary widely, so the IHV-2 should be tested when installed in the actual installation to make sure the flash rate is adequate. If there are no flashes, or if the flash rate is less than one flash every 2-3 seconds, the IHV-2 should not be used.

The IHV-2 may not flash at levels below its rated voltage that could still be dangerous. For this reason and others, the IHV-2 should only be used to supplement good safety practices, such as lock-out procedures, visible disconnects, etc., and not as the sole indication that a conductor is unpowered.

When installing the IHV-2, it is vital to maintain proper spacing to other conductors and ground. The entire IHV-2 unit must be treated as being at the same potential as the conductor that it is attached to.



Mechanical Dimensions:



Ordering Information:

IE PN	Model	Monitor Range ($V_{\phi-N}$)
1100-9550	IHV-2-1	2kV-15kV
1100-9550-3	IHV-2-1 3-Pack	2kV-15kV
1100-9551	IHV-2-2	15kV-40kV
1100-9551-3	IHV-2-2 3-Pack	15kV-40kV



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Important Notice

This document contains information intended to aid in the proper installation and operation of the product described. Although this information will prove useful to the properly trained and qualified user, it is not practical to cover every possible situation, installation contingency, or other detail.

It is imperative that proper engineering and techniques are adhered to in the installation, operation, and maintenance of this product. It is the responsibility of the user to ensure that any system utilizing this product is safe, and that all personnel involved with the selection, installation, maintenance, and use of this product are properly qualified. This product must not be used in situations where its ratings are exceeded.

While every effort has been made to make sure the information in this document is accurate, IE cannot guarantee that there are no errors. Users of this product should verify any aspects of the product's design or performance that are critical to their application, and in particular, any aspects that may affect the safety of the overall system or installation.

Product design and specifications may change without notice.