

## PDU-G1, 2

### UHF Sensor for Partial Discharge Monitoring of GIS/GIL



#### Main Functions

- Provide an oil-tight dielectric window that can transmit electromagnetic waves
- Extract partial discharge signals within the UHF range inside the device
- Suppression of external noise, such as corona
- Can be used as a trigger source for ultrasonic partial discharge measurement

In engineering applications, UHF sensors have been widely used to detect defects such as cracks in physical structures, displacement and tilt detection in wireless radio frequency identification systems, and partial discharge measurements in high voltage engineering. These applications are practically feasible because the transient process of these defects have very short rise times, which results in induced frequency components in the UHF range. An UHF sensor plays a significant role in UHF PD measurement because the initial step of PD measurement is to acquire electromagnetic signals using these devices for further signal processing. To this end, the performance of the sensors will dramatically influence the accuracy and sensitivity of the PD detection system.

Thanks to the PDU-G sensor made by Innovit Electric, which provides you with high sensitivity and accurate measurement for ultra-high frequency (UHF) detection and PD positioning, and they are can be customized according to customer's specific technical requirements and connected to any PD monitoring equipment of any gas-insulated substation, regardless of the manufacturer.



PDU-G1 Internal Window UHF Sensor

## Specification

Model	PDU-G1	PDU-G2
Type	Internal Window UHF Sensor	External UHF Sensor
Application	Indoor or Outdoor	Indoor or Outdoor
Bandwidth	300 ~1500 MHz	300 ~1500 MHz
Average Effective Height	10 mm	12 mm
Type of Antenna	Dipole	Butterfly
Load Impedance	50 $\Omega$	50 $\Omega$
Output	N-Connector	N-Connector
Operating Temperature	-40 ~ +85 °C	-40 ~ +85 °C
Protection Degree	IP65	IP65

## Dimensions

Please contact us to have the detailed dimensions.



**Xi'an Innovit Electric Co., Ltd.**

No. 190 of Western Avenue, Xi'an, China

029-8938 5800

029-8958 7330 (Fax)

[www.innovit.com.cn](http://www.innovit.com.cn)

[sales@innovit.cn](mailto:sales@innovit.cn)

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