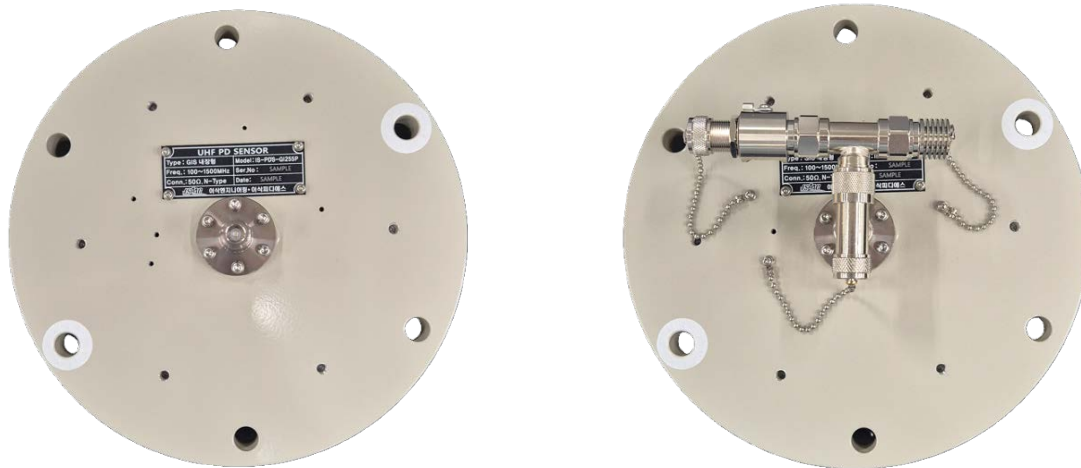


## IS-PDS-GI255P

### Embedded UHF PD Sensor for GIS, Patch Type

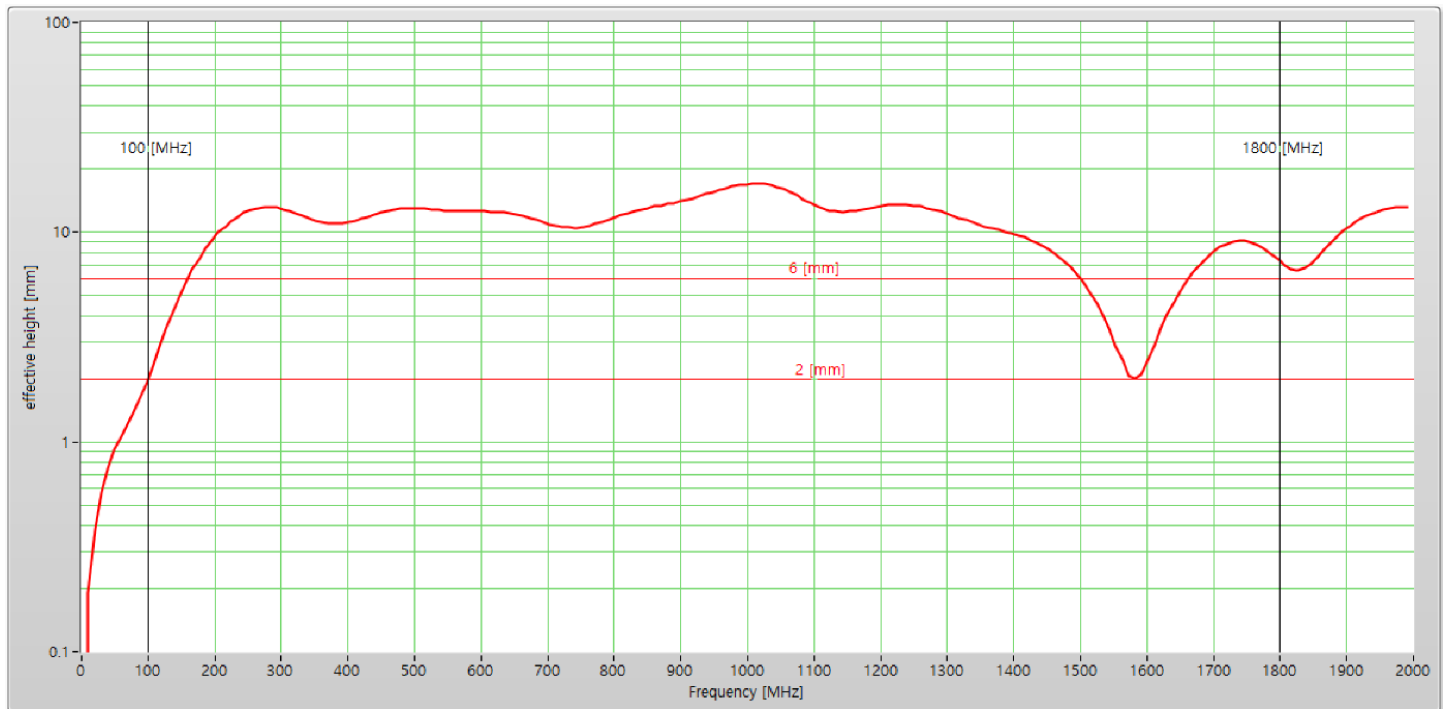


Insulation defects occur due to electrical/mechanical stress and other environmental factors, and the occurrence patterns of partial discharge vary depending on the type of defect. In the case of Gas Insulated Switchgear (GIS), defects such as conductor and outer casing protrusions, and spacer cracks may occur during manufacturing, transportation, installation, and operation. IS-PDS-GI255P measures partial discharge signals in the UHF (Ultra High Frequency) band caused by internal GIS defects, enabling early detection of GIS faults and supporting reliable equipment operation.

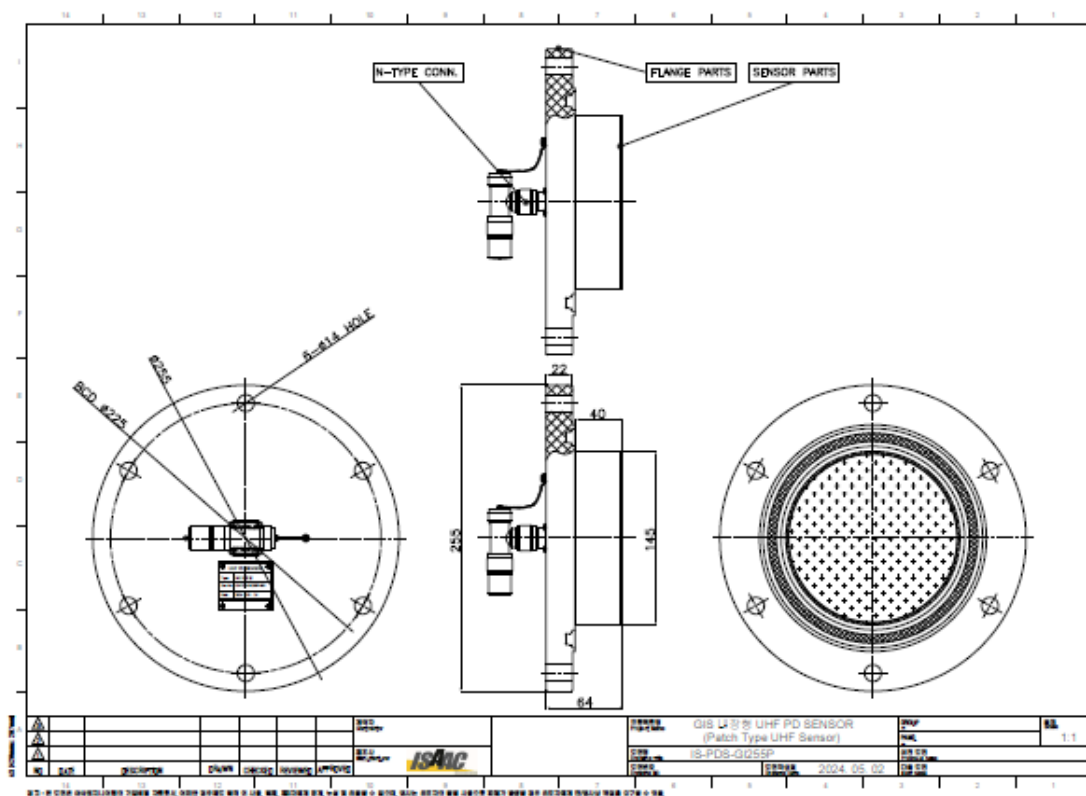
### Technical Specification

Operation Frequency Range	100MHz ~ 1,500MHz
Sensor Sensitivity	IEC60270 Apparent Discharge / Below 5pC PD Detection (Above -40dBm / 0.1uW, 50Ω Standard)
Impedance	50Ω
Connector	IEC61169-16 / N-type (Female)
Average Effective Height	100MHz ~ 1,800MHz / 11mm (500MHz ~ 1,500MHz / 13mm)
Operating Temperature	-55 ~ +85°C
Degree of Protection	IEC60529 / IP-56
Applicable Pressure	-760mmHg. G ~ 7kgf/cm <sup>2</sup> . G
Dimensions	O.D 255Φ x I.D 145Φ x H 64/40mm, M12 x 6

## Average Effective Height



## Layout



Product &amp; Model Name

Patch Type UHF Sensor , IS-PDS-GI255P

Test List

Cold / Dry heat / Damp heat, cyclic / Vibration



## TEST REPORT



Dt&amp;C Co., Ltd.

42, Yurim-ro, 154Beon-gil, Cheoin-gu, Yongin-si  
Gyeonggi-do, Korea  
Tel : 031-321-2664, Fax : 031-321-0220



1. Report No : DRCKREL2410-0464
2. Customer
  - Name : ISAAC PDS
  - Address : #2705, 120 Heungdeokjungang-ro (Yeongdeok-dong, UTOWER),  
Giheung-gu, Yongin-si, Gyeonggi-do
3. Use of Report : For quality control
4. Product Name / Model Name : Patch Type UHF Sensor / IS-PDS-GI255P
5. Test Method Used : IEC 60068-2-1 : 2007, IEC 60068-2-2 : 2007, IEC 60068-2-6 : 2007,  
IEC 60068-2-30 : 2005
6. Date of Test : October 01, 2024 ~ October 11, 2024
7. Location of Test : ☒ Permanent Testing Lab ☐ On Site Testing  
(Address : 28, Baengnyeong-ro, 20Beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea)
8. Testing Environment : Temperature (22 ± 5) °C , Humidity (46 ± 9) % R.H.
9. Test Result : Refer to the attached Document  
The results shown in this test report refer only to the sample(s) tested unless otherwise stated.  
This laboratory is not accredited for the test results marked. " \* " "

Affirmation	Tested by	Technical Manager
	Name : NamGyu Lee	Name : KiDeok Kim
	Name : HeeKwan Jung	

The above test report is the accredited test result by Korea Laboratory Accreditation Scheme,  
which signed the ILAC-MRA.

October 22, 2024

Dt&amp;C Co., Ltd.

Accredited by KOLAS, Republic of KOREA

If this report is required to confirmation of authenticity, please contact to [report@dtnc.net](mailto:report@dtnc.net)

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Product & Model Name	Patch Type UHF Sensor , IS-PDS-GI255P
Test List	Insulation resistance measurement & High voltage Test

## TEST REPORT

	<b>Dt&amp;C Co., Ltd.</b> 42, Yurim-ro, 154Beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea Tel : 031-321-2664, Fax : 031-321-1664	
1. Report No : DRCREL2410-0748 2. Customer • Name : ISAAC PDS • Address : #2705, 120 Heungdeokjungang-ro (Yeongdeok-dong, UTOWER), Giheung-gu, Yongin-si, Gyeonggi-do 3. Use of Report : For quality control 4. Product Name / Model Name : Patch Type UHF Sensor / IS-PDS-GI255P 5. Test Method Used : Request of customer 6. Date of Test : October 08, 2024 7. Location of Test : <input checked="" type="checkbox"/> Permanent Testing Lab <input type="checkbox"/> On Site Testing 8. Testing Environment : Temperature (21 ± 4) °C, Humidity (46 ± 9) % R.H. 9. Test Result : Refer to the attached Document The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report is not related to KOLAS accreditation.		
Affirmation	Tested by Name : NamGyu Lee 	Technical Manager Name : KiDeok Kim 
	October 22, 2024  <b>Dt&amp;C Co., Ltd.</b>	

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Product & Model Name	Patch Type UHF Sensor , IS-PDS-GI255P
Test List	IP5X(Dust-protected) & IPX6(Protected against powerful water jets)

## TEST REPORT

	<b>Dt&amp;C Co., Ltd.</b> 42, Yurim-ro, 154Beon-gil, Cheoin-gu, Yongin-si Gyeonggi-do, Korea Tel : 031-321-2664, Fax : 031-321-0220	 
<p>1. Report No : DRCKREL2410-0470</p> <p>2. Customer</p> <ul style="list-style-type: none"> <li>• Name : ISAAC PDS</li> <li>• Address : #2705, 120 Heungdeokjungang-ro (Yeongdeok-dong, UTOWER), Giheung-gu, Yongin-si, Gyeonggi-do</li> </ul> <p>3. Use of Report : For quality control</p> <p>4. Product Name / Model Name : Patch Type UHF Sensor / IS-PDS-GI255P</p> <p>5. Test Method Used : IEC 60529 : 2013</p> <p>6. Date of Test : October 14, 2024 ~ October 15, 2024</p> <p>7. Location of Test : <input checked="" type="checkbox"/> Permanent Testing Lab <input type="checkbox"/> On Site Testing (Address : 28, Baengnyeong-ro, 20Beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea)</p> <p>8. Testing Environment : Temperature (23 ± 4) °C , Humidity (46 ± 7) % R.H.</p> <p>9. Test Result : Refer to the attached Document</p> <p>The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This laboratory is not accredited for the test results marked. " * "</p>		
Affirmation	Tested by Name : NamGyu Lee 	Technical Manager Name : KiDeok Kim 
The above test report is the accredited test result by Korea Laboratory Accreditation Scheme which signed the ILAC-MRA.		
<p style="text-align: center;"><b>October 22, 2024</b></p> <p style="text-align: center;"><b>Dt&amp;C Co., Ltd.</b> Accredited by KOLAS, Republic of KOREA</p>		

If this report is required to confirmation of authenticity, please contact to [report@dtnc.net](mailto:report@dtnc.net)

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