



## UHF Sensor

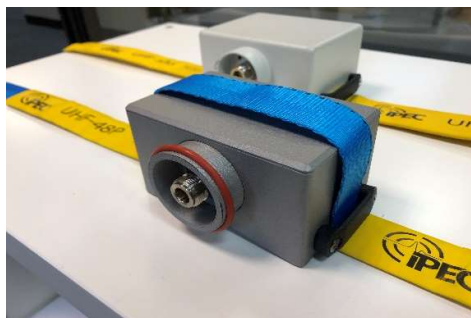
### PD Sensors for GIS, GIL & GIT



IPEC's **UHF (Ultra High Frequency) sensors** is used to detect PD in EHV cable terminations, GIS (Gas Insulated Switchgear), GIL (Gas Insulated transmission Lines) & GIT (Gas Insulated Transformers). The sensors pick up signals in the UHF range (200MHz-2.5GHz) and are mounted against the insulating barrier spacers that separate components of the HV asset. The sensors work with multiple IPEC monitoring systems.



Sensors are installed differently depending on the asset manufacturer and model and accessibility to insulating sections, gaskets, UHF windows, and accessibility. Please contact IPEC for specific applications



## Technical Specification

Sensor	UHF-48P	UHF-50A
Frequency Response	200MHz to 2.5GHz	200MHz – 2.5GHz
Sensitivity	-49dBm, < 5pC	-49dBm, < 5pC
Mean Effective Height (500MHz-1,500MHz)*	8.5mm	8.0mm
% effective height above 2mm (500MHz-1,500MHz)*	96%	100%

Shield can	Insulated can	Full can
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\* According to The National Grid Company plc Technical Guidance Note TGN(T)121 Issue 1 (1997)

Amplifier		
Amplifier gain	31dB	31dB
Bandwidth	20MHz	20MHz
Recommended Load Impedence	50Ω	50Ω
Power Requirements	12VDC, 150mA	12VDC, 150mA
Operating temperature	-10 to 70°C	-10 to 70°C
Operating humidity range	0% to 95% (RH)	0% to 95% (RH)
Provision to ensure the hubs can work under 100% RH	IP 66	IP 66



Physical		
Output Connector	N-Type	N-Type
Max signal cable length	100 m	100 m
Coupling	25mm Strap	25mm Strap

Dimensions		
Size (l x w x h)	120 x 64 x 60mm	120 x 80 x 60mm
Weight	0.5 kg	0.7 kg

Designed and manufactured in the United Kingdom