



USENS-B

GIS UHF External Barrier Sensor

USENS-B PD Detection with Precision and Sensitivity



Engineered for accurate detection of even the most minor UHF frequencies emitted by PD activity, ensuring enhanced coverage for GIS monitoring and guaranteeing the safety of critical assets against catastrophic failures.

The USENS-B is a compact, high-dielectric, and highly sensitive Ultra-High Frequency (UHF) PD sensor designed for temporary and permanent Gas-Insulated Switchgear (GIS) monitoring. It precisely detects even the smallest PD signals, ensuring superior reliability and accuracy. With its robust construction, USENS-B is ideal for installation in GIS barrier openings, busbars, and terminal boxes, offering wide frequency response and maximum GIS coverage even in the most demanding environments.

The sensor offers exceptional adaptability, with customizable configurations to fit any barrier size. The built-in overvoltage protection and N-type connection provide added durability and seamless integration with any UHF-based PD monitoring system, regardless of the manufacturer. Whether for new GIS installations or retrofitting older substations, USENS-B is engineered for long-term reliability. Its simple installation process and compatibility with various applications make it a trusted solution for protecting critical electrical assets and preventing catastrophic failures.

» Benefits

- Seamless Installation and Real-time Diagnostics
- Durable and Safe
- Environmental Protection
- Universal Compatibility
- Shielded to avoid electromagnetic interference

» Features

- Built for durability in demanding environments
- Simplified setup on GIS barriers
- Ensures safe operation in high-voltage areas
- Safeguards electronics during surges
- Wide frequency band for comprehensive PD monitoring
- Noise immunity for accurate readings
- Weatherproof design for outdoor substations
- Designed to fit any barrier opening

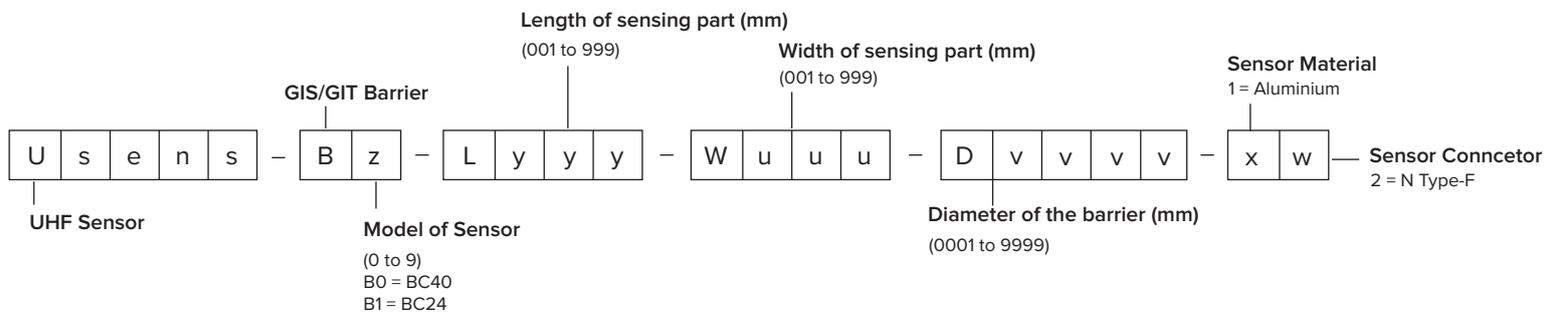
» Applications

- Periodic PD Testing and Measurements
- Continuous Online PD Monitoring
- High Voltage Testing after Maintenance/ Overhaul
- GIS/GIL PD Testing and Monitoring
- GIT (Gas Insulated Transformers) PD Testing and Monitoring

» Technical Specifications

Frequency Response	Decoupling Range of 200MHz - 2000 MHz
Mean Effective Height over 500 MHz - 1500 MHz (mm)	>6 mm
PD Output	N-Type Female connector
Connector Circuit Impedence	50 Ω
Dimensions (L*H*W) in mm	150mm length*75mm Height*40mm width
Sensor Dimensions (L*W) in mm	55mm length*32mm width
Sensor Material	Aluminium
Strap Length	Length is based on GIS/GIL diameter
Weight	0.60 Kg
Installation Position	GIS/GIT/GIL Barrier Openings
Vibration Testing (IEC 60068-2-6)	20 sweeps of 9G force in 6 degrees of freedom
Ingress Protection (IP) (IEC 60529)	IP65
Ambient (Operating Temperature)	-40°C to +110°C
Storage Temperature	-40°C to +110°C
Operating Humidity	95% humidity at 50°C

» Ordering Code



CERTIFICATIONS



ISO 9001:2015



ISO 14001:2015



ISO 45001:2018



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