

USENS-BT

Safeguard Bushings with our Advanced PD Detection.



USENS-BT is a high-performance Partial Discharge (PD) sensor designed for transformer bushings. Engineered for durability and accuracy, it delivers reliable monitoring of PD activity, enabling early detection of insulation issues.

The USENS-BT is a rugged Partial Discharge (PD) sensor designed for installation on transformer bushing trunks. It offers precise detection of Ultra High-Frequency (UHF) PD signals, ensuring comprehensive and accurate monitoring of insulation health.

Built for performance in harsh environments, the IP65-rated sensor features integrated transient overvoltage protection to minimize electrical transients, improving reliability and extending its lifespan. The USENS-BT ensures seamless integration with a wide range of PD monitoring systems, regardless of manufacturer, and is equipped with advanced noise-immune coaxial cables and N-type female connectors. This highly durable and versatile sensor is essential for effective transformer bushing condition monitoring. It delivers precise results and supports the long-term performance of high-value electrical assets.

This advanced solution enhances safety, extends the operational lifespan of critical electrical assets, and supports condition-based maintenance strategies.

» Benefits

- Integrated transient overvoltage protection
- High noise immunity for accurate measurements
- Quick and hassle-free installation
- Rigorously tested for reliability and performance

» Features

- Supports UHF signal detection for precise monitoring.
- Rugged design ensures durability in harsh environments.
- IP65-rated enclosure provides resistance against dust and water.
- Integrated transient overvoltage protection minimizes electrical risks.
- Multiple internal diameter options accommodate various bushing sizes.

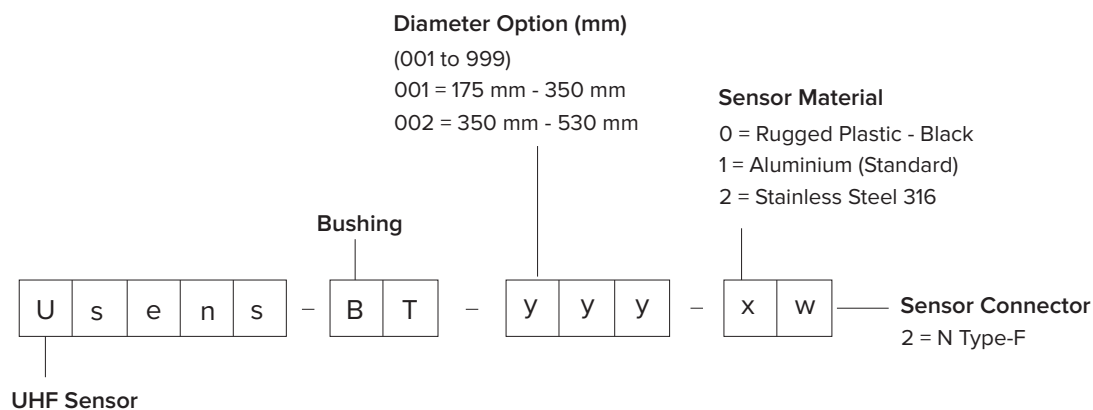
» Applications

- Online periodic partial discharge (PD) monitoring.
- PD measurement during HV AC testing.
- Multi-Point PD Monitoring across transformer bushings in substations.
- Power Transformer PD Detection for reliable insulation health assessment.

» Technical Specifications

Frequency Response	100 MHz - 1200 MHz
Sensor Sensitivity	>5 mV/mA
PD Output	N-Type female connector
Circuit Impedence	50 Ω
Dimensions (L * H) in mm	81 mm Length * 53.75 mm Height
Suitable for bushing diameter	Option-1: Bushing Diameter 175mm to 350mm Option-2: Bushing Diameter 350mm to 530mm *Customize strap length based on bushing diameter
Weight	<0.8 Kg
Installation Position	Near the Bushing Test tap
Vibration Testing (IEC 600682-6)	20 sweeps of 9G force in 6 degrees of freedom
Ingress Protection (IP) (IEC60529)	IP65
Ambient (Operating Temperature)	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Operating Humidity	95% humidity at 50°C
Recommended Signal Cable	Standard RG 223 Cable

» Ordering Code



CERTIFICATIONS



ISO 9001



ISO 14001



OHSAS
18001



Lloyd's
Register



Atex
Certification



NIST
Certification



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