



# USENS-C

Cable UHF External Sensor

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High-performance reliability with our robust UHF PD sensor



A rugged, reliable, and high-performance UHF PD Sensor designed for power cables, ensuring durability, safety, and longevity in demanding environments.

USENS-C is an advanced Ultra High Frequency (UHF) Partial Discharge (PD) sensor that delivers precise and reliable PD detection for cable terminations, joints, and cable sheath. Engineered for durability and safety, it features an IP65-rated enclosure that ensures robust performance in indoor and outdoor environments, even in harsh environments. It incorporates integrated transient overvoltage protection, safeguarding the sensor and connected PD monitoring systems for unexpected electrical surges, enhancing system reliability and longevity.

With its high sensitivity and optimized frequency response, USENS-C ensures early and accurate detection of PD activity, allowing for timely maintenance and reduced downtime. Its compact and easy-to-install design allows direct mounting on power cables and switchgear, enabling seamless integration into new and existing monitoring systems. It minimizes electromagnetic interference, delivering noise-free and precise PD measurements, making it an ideal solution for utilities, industrial facilities, and asset managers.

## » Benefits

- Weather-Resistant Design
- Durable and Reliable
- Safety from transient surges
- Easy installation
- Broad Compatibility

## » Features

- Ultra-High Frequency PD Detection
- Ensures durability in demanding environments.
- Suitable for harsh indoor and outdoor conditions.
- Integrated transient overvoltage protection from surges.
- Simple and hassle-free setup on cables
- Available in various internal diameter options to meet specific requirements.

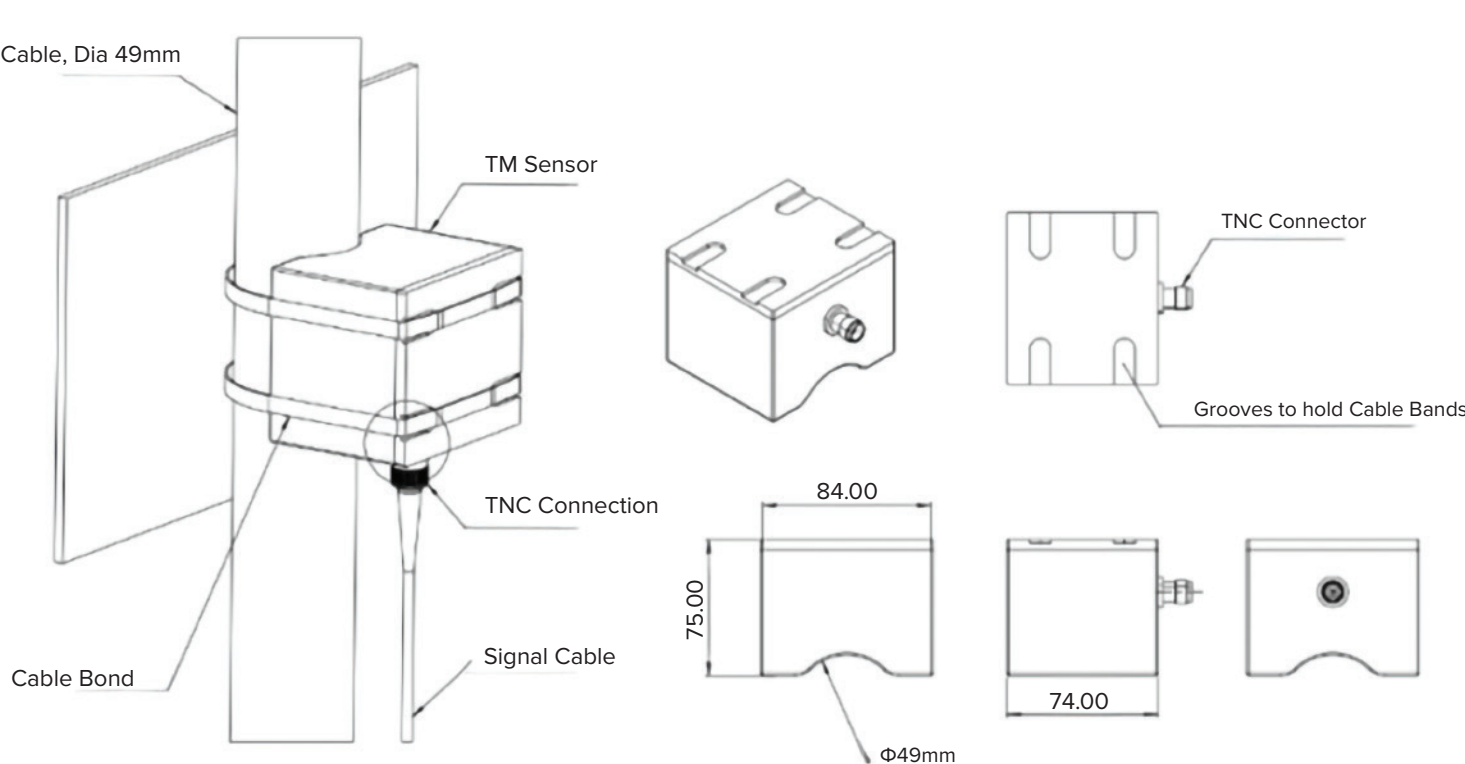
## » Applications

- Online periodic partial discharge monitoring
- Multiple-point PD monitoring
- Cable PD monitoring- terminations, joints, and cable sheath

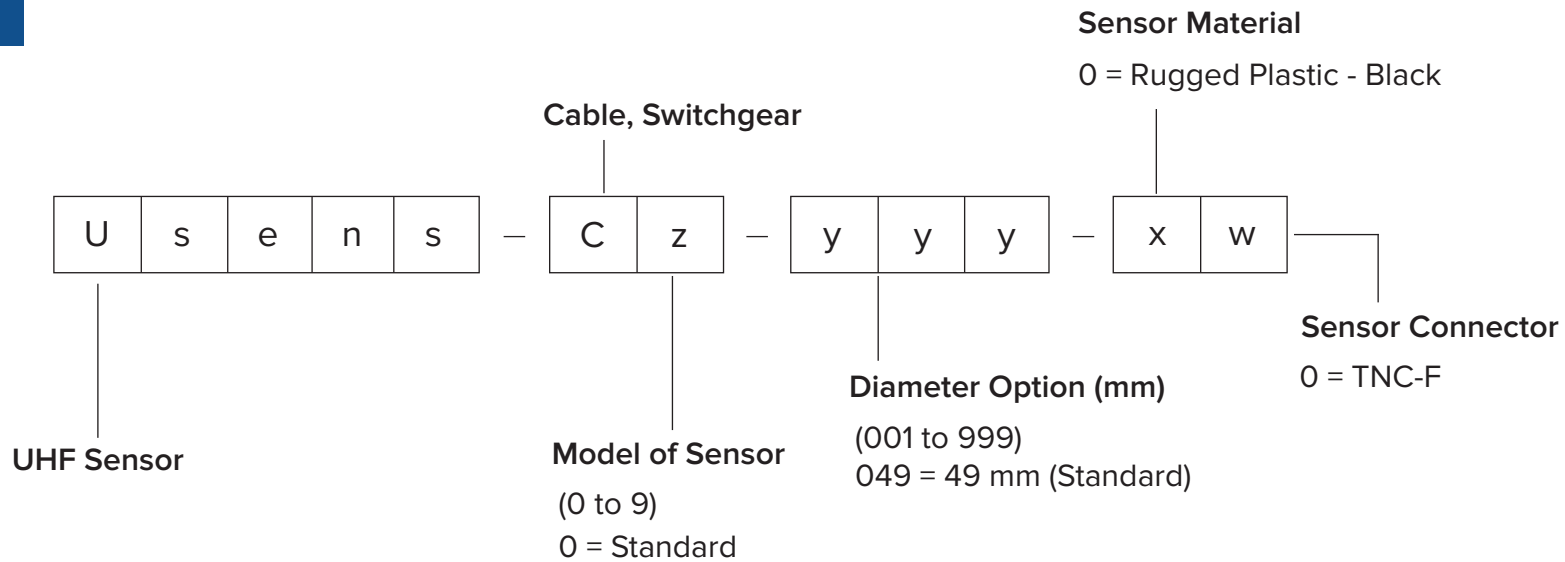
## » Technical Specifications

Frequency Response	30 MHz - 1000 MHz
Sensor Sensitivity	>5 mV/mA
PD Output	TNC - Type Female Connector
Connector Circuit Impedence	50 $\Omega$
Dimensions (L * H) inmm	84 mm Length * 75 mm Height
Sensor Diameter	49 mm standard (other diameter based on cable diameter)
Sensor Body material	Acetal
Standard Design for	Cover all cable diameters and the Earth strip
Weight	<0.8Kg
Installation Position	On cable termination, joints, outer jackets, and cable sheath
Ingress Protection (IP) (IECC 60529)	IP65
Ambient (Operating Temperature)	-30°C to +120°C
Storage Temperature	-30°C to +120°C
Operating Humidity	95% humidity at 50°C

## » Product Drawing



## » Ordering Code



### CERTIFICATIONS



ISO 9001



ISO 14001



OHSAS  
18001



Lloyd's  
Register



Atex  
Certification



NIST  
Certification



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