

HSENS-T

Rugged and Robust design to measure partial discharges



HSENS-T

Rugged and Robust design to measure partial discharges



Rugged and Robust design to measure partial discharges in Power Transformers, Switchgears, Rotating Machines and Cables (and their accessories)

Hsens-T is a Transient Earth Voltage Sensor that can be used to detect internal, external and surface partial discharges inside metal clad switchgear or power cables termination box of rotating machines

and power transformers. An application of HFCT along with TEV can help in PD diagnostic and confirmation of internal versus external PD. Sensor is IP65 rated with integrated transient overvoltage protection feature inside sensor.

Transient protection will help in minimizing transients that can be expected during PD monitoring. TEV sensor has strong magnets that help it to attach to the walls of metal clad switchgear. TEV forms a capacitive coupling with grounded metal switchgear to detect transients of external PD happening inside metal clad switchgear at termination.

Features

- Transient Earth Voltage Sensor
- Rugged and compact design with IP65 rating
- Strong magnets to attach sensor
- Transient overvoltage protection integrated inside Sensor
- RG223 high noise immunity cable
- TNC connector for reliable connection

Applications

- Online periodic partial discharge monitoring
- Offline PD measurement during HV AC testing
- Multiple point PD monitoring
- Power transformers
- Rotating machines
- AIS/GIS switchgear
- Cables, joints and terminations



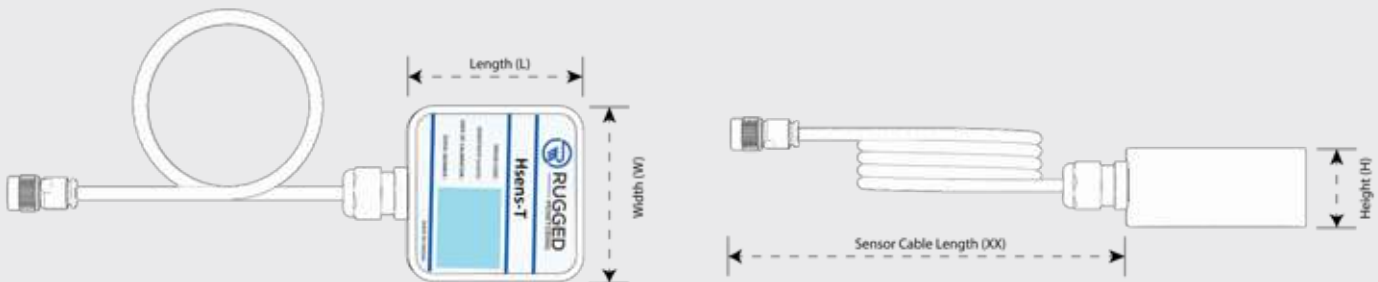
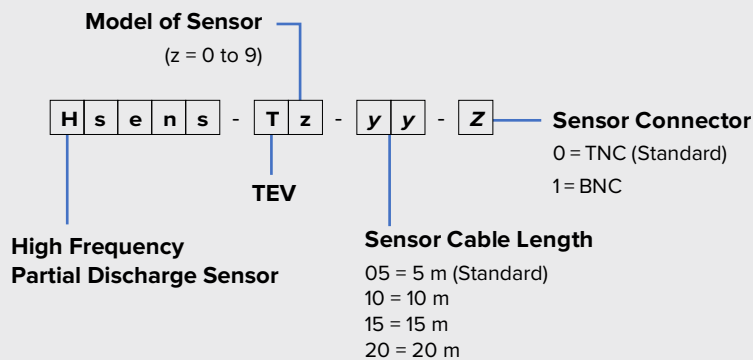
Benefits

- Rugged and Robust sensors with IP 65 rating
- Highly immune to noise
- Rigorously tested
- Transient overvoltage protection
- Heavy duty magnets to hold sensors
- Customizable according to customer specific applications
- Suitable for Online or Offline PD measurements

Technical Specifications

SENSOR	Type	Integrated magnets help it to attach to metal clad switchgear
	Typical Frequency Response (-6dB)	1 MHz - 100 MHz
	Material	Rugged Plastic (Black), other options available
SIGNAL CABLE	Type	RG223
	Connectors	Cable Gland (Sensor End) and TNC connector (Monitor End), other options available
	Cable Length	5m as standard, other options available
IP RATING	IP65	
TEMPERATURE	Ambient	-30°C – 70°C
	Storage	-40°C - 85°C
DIMENSIONS	70mm (L) x 70mm (W) x 33 mm (H)	
CUSTOMIZATION	For any different requirement, please consult	

Ordering Code



Asset Monitoring : Enterprise Architecture

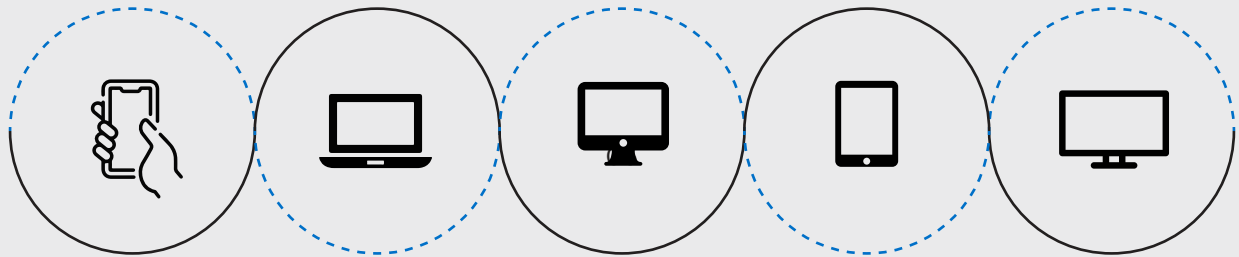
Compatible with Rugged Monitoring Enterprise Solution

UI UX



- Data Layer
- Analytics
- User Interface
- Custom Dashboards
- Reporting
- Email/SMS Notifications

RM EYE



Private Cloud (Customer Cloud),
Rugged Monitoring Cloud

IEC 60870-104

IEC 61850

FTP/SFTP

- XML, JSON

- CSV, COMTRADE



Data Collection

ODBC

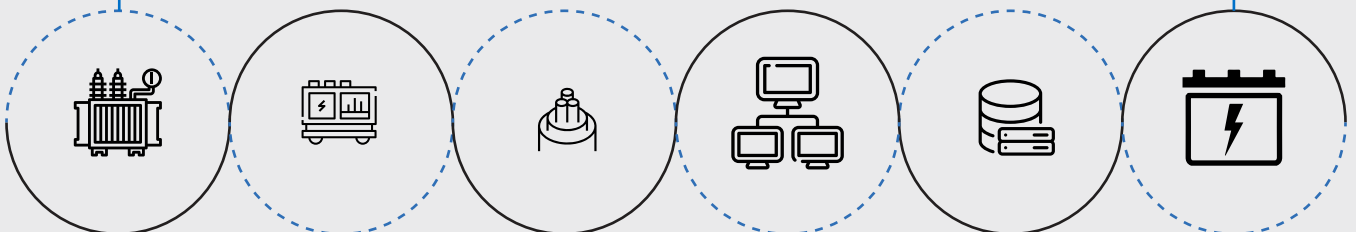
MODBUS

DNP 3.0

HTTPS

MQTT

Asset Data



Transformer
Monitoring
System

Switchgear
Monitoring
System

Power Cable
Monitoring
System

- Offline Test Results
- Inspection Records
- Name Plate

- Historian
- CMMS
- SCADA/ DCS

Power Electronics
(Battery, UPS,
VFD, Relay)

One Solution for Multi-Site Multi Asset Monitoring

Manage different industrial assets on one platform without human intervention

Features

- **Advanced and Exceptional Reporting**
Technology with automated alerts
- **Modern remote monitoring solutions** provide valuable insights to Multiple Assets at Multiple Sites on real-time
- **Robust asset health monitoring** with analysis and recommendations support asset effectiveness in addition to maximizing equipment uptime
- **Establish a real time and consistent monitoring** by getting the right information into right hands
- **An efficient, reliable partial discharge monitoring** for all the assets
- **A detailed comprehensive DGA Analysis**
- **Lifetime Consumption details.**
- **Built on well-established remote and cloud-based monitoring technology**
- **Simple user-friendly interface** providing fast access to all the features and commands
- **Quick and easy 1 step configuration setup**
- **Encompasses a secure access to data and configuration**
- **Advanced asset algorithms** based on standard ones with new ideas
- **Systematic fleet management and analysis**
- **Extended multilingual support** to handle product inquires or troubleshoot problems proactively
- **Up System Level Reporting**
- **Industrial IoT**

Features Specific to PD Monitoring

- Partial Discharge monitoring and Analysis
- PRPD : Phase resolve partial discharge
- Partial Discharge Amplitude and Discharge rate trend analysis
- Partial Discharge Fault localization
- Artificial Intelligence based PD fault Identification
- Realtime PD Alarm system
- Get Alarm notifications for individual bushing parameters over Email, sms and push notifications
- Analytics on Online, and offline partial discharge test data

Why Customers Choose Us?

RM solution, the trusted monitoring solution for over 10000+ assets across 50+ countries. We are a leading High Value Electrical Asset Monitoring Company integrating fibre optic technology to the assets.



Attention to Details

It's our attention to the small stuff, scheduling of timelines and keen project management that makes us stand out from the rest.



A plan for Success

Our Customers are well satisfied with the advisory services that we offer to help them with best in class technological performance and a long durable life.



Experts only

We bring in our diversified experienced team with over 100+ years of experience in Asset Monitoring



Meeting Deadlines

Work with us, and you'll work with seasoned professionals – vigilant of deadlines, and committed to exceeding client expectations.



Money Matters

We protect you against currency fluctuation with competitive and fair market prices



Rugged Monitoring Services

Rugged Monitoring provides customization of sensors, monitors & software. In addition we offer on-site commissioning services, maintenance contracts and technical support to all customers worldwide.

About Rugged Monitoring

Industry's leading team of asset condition monitoring experts with 100+ years of combined experience committed to delivering customizable solutions for challenging applications. We offer a range of reliable, high performance, customizable sensors and monitoring solutions that are immune to external influence.

Certification



ISO 9001



ISO 14001



ISO 45001/
OHSAS 18000



Lloyd's
Register



ATEX
Certification

Our Presence Across the Globe



Head Office

 **Canada**

1415 Frank-Carrel, Suite
230, Quebec, QC - G1N
4N7, CANADA

 +1-418-767-0111

Asia Pasific | India | Europe | Latin America | Middle East | North America



 ruggedmon

 info@ruggedmonitoring.com

 www.ruggedmonitoring.com

©2021 Rugged Monitoring Company. All rights reserved. Information subject to change without notice. All trademarks are properties of their respective companies, as noted herein.