

Optical fiber ultrasonic sensor

Description

The optical fiber ultrasonic sensor is a new type of optical fiber device using Fabry-Perot (F-P) resonator and vibration diaphragm as sensitive units, which can be used to capture ultrasonic signal generated in partial discharge events.

Applications

- Metal tip discharge monitoring
- Floating potential body discharge monitoring
- Surface discharge monitoring
- Free metal particle discharge monitoring
- Insulator internal gas discharge monitoring

Features

- Passive, anti-electromagnetic interference
- Small size
- Wide frequency response range
- Long measuring distance



Specification

Parameters	Unit	Specification
Range of ultrasonic frequency to be measured	kHz	20-50
Detection range	m	≤1.0
Signal to noise ratio	dB	>25 (@40 kHz, 1.0 m)
Probe size	mm×mm	Φ13×35
Operating temperature range	°C	-40~+80
Fiber connector type	-	FC/APC (or customize)
Pigtail Length	m	1.0 (or customize)