

US01 Optical fiber ultrasonic sensor

Description

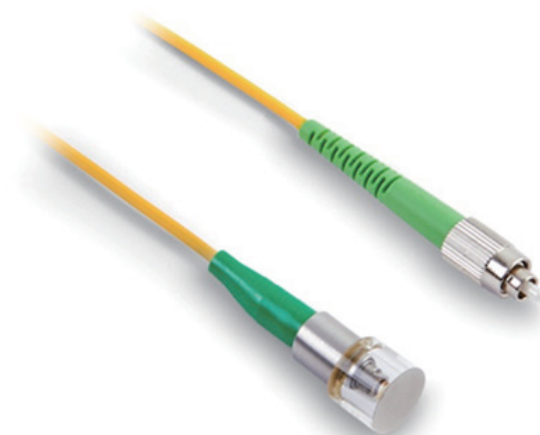
The optical fiber ultrasonic sensor is a new type of optical fiber device using Fabry-Perot (F-P) resonator and vibration diaphragm as sensitive units, which can be used to capture ultrasonic signal generated in partial discharge events.

Features

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

Applications

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



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 to +80
Fiber Connector Type	-	FC/APC or Specified
Pigtail Length	m	1.0 or Specified