Optical Fibre Sensing Demodulator YOSC-FD-M

YOSC-FD-M optical fibre sensing demodulator is a highly reliable industrial fibre grating sensor developed by YOSC for industrial applications.



The product is based on the principle of holographic phase grating detection technology, the product can achieve high-speed dynamic measurement of up to 8000Hz in a single channel.

It can be widely used in bridge tunnel, petroleum and petrochemical industry, power industry and other fields of temperature, strain, displacement, vibration and other physical quantities of long-term high-precision monitoring.

+ Features

- Array detection, no mechanical moving parts, good anti-vibration performance
- Each channel can connect 20 fibre optic sensors
- Single channel measurement frequency up to 8KHz
- High precision, high stability, and high reliability
- Real time acquisition of high-speed dynamic physical quantities

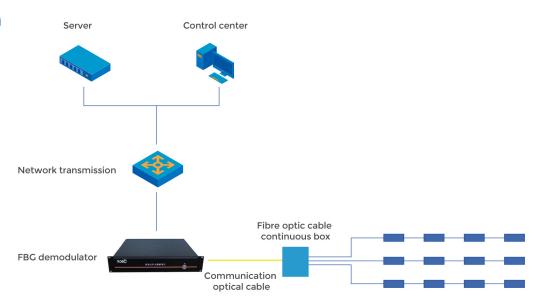
+ Applications

- Structural health monitoring in civil engineering
- Online temperature monitoring of power transmission and transformation equipment such as switchgear and cables
- Monitoring of geological hazards such as slopes and dangerous rocks
- Fibre optic sensing monitoring

+ Parameters

Items	YOSC-FD-M
Working wavelength	1528~1568nm(1525~1605nm optional)
lumber of supported channels	4, 8, 16 optional
umber of sensors supported per channel	20
etection distance	40km (without considering additional losses)
ollection frequency	1~1000Hz(8000Hz optional)
avelength resolution	0.1pm
avelength repeatability	±1pm
otical interface	FC/APC
ower supply characteristics	220V/50Hz
ower dissipation	<50W
ommunication protocol	UDP, Modbus-TCP, etc.
ommunication interface	RJ45, USB
imension	1.5U rack mounted, integrated, ultra small portable (dimension customizable)

+ System Composition



Fibre Bragg Grating Sensors