

## 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)
Number of supported channels	4, 8, 16 optional
Number of sensors supported per channel	20
Detection distance	40km(without considering additional losses)
Collection frequency	1~1000Hz(8000Hz optional)
Wavelength resolution	0.1pm
Wavelength repeatability	±1pm
Optical interface	FC/APC
Power supply characteristics	220V/50Hz
Power dissipation	<50W
Communication protocol	UDP, Modbus-TCP, etc.
Communication interface	RJ45, USB
Dimension	1.5U rack mounted, integrated, ultra small portable (dimension customizable)

## + System Composition

