DVS Integrated Optical Module

Distributed fiber Vibration Sensing（DAS），based on the principle of phase OTDR, using a single ordinary optical fiber as a transmission, the Rayleigh scattered light inside the fiber to detect, obtain phase and intensity information, to achieve the detection of vibration and other signals, widely used in oil, gas pipelines, perimeter security, high-speed rail transit and other fields.

For the field of distributed fiber optic acoustic sensing, FIBERWDM has launched DVS integrated module, which integrates self-developed ultra-narrow linewidth laser, linewidth <3KHz, 80M_AOM, pulse amplifier, coherence intensity detector, for higher SNR than common detectors. The module is highly integrated, with small size and high reliability.
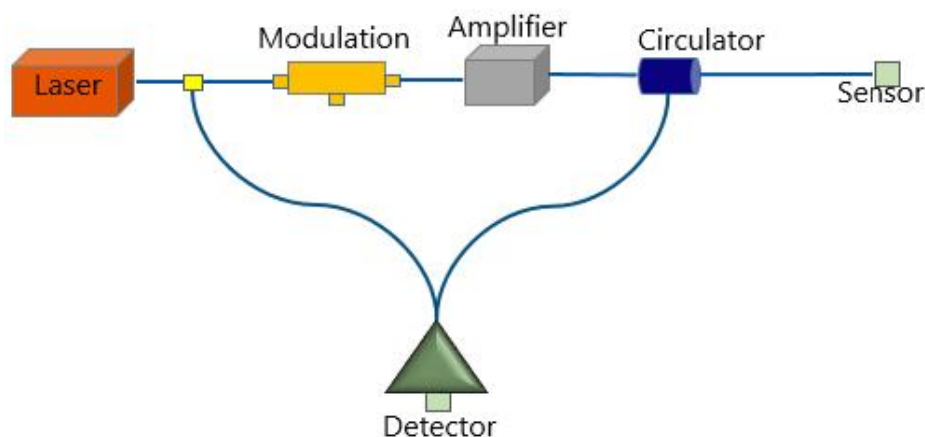
Features

◆ Highly Integrated
(UNL, AOM, EDFA, Detector)
◆ Working Temperature: -15~55℃
◆ High Reliability and Stability
◆ Flexible Control Mode
◆ Single / Dual Channel

Applications

◆ Oil and Gas Pipelines
◆ Perimeter Security
◆ High-speed Rail Transit
◆ Power Cables

Optical Path

Product Specification

Product Model: FW-DVSXXX				
Parameters	**Min**	**Typ.**	**Max**	**Unit**
Sensing Distance	-	-	40	Km
Center Wavelength	-	1550.12	-	nm
Linewidth	-	-	3	Khz
Pulse Width	60	100	-	ns
Repetition Rate	-	1	20	KHz
Peak Pulse Optical Power	-	23	30	dBm
Rise/Fall Time	-	-	30	ns
Input Impedance	-	50	-	Ohm
Shift Frequency	-	80	-	MHz
Wavelength	800~1700			nm
Gain	30K			V/A
Coupling Mode	AC			
Bandwidth	100			MHz
Modulation Mode	External			
Note:1)Single and Dual channel can be selectable; XXX: 366-Single Channel, 381-Dual Channel 2) AOM Driver is built-in				

Parameters		**Indicator**	**Remark**
Electrical	Power Supply	DC +12V/GND	
	Power Consumption	<24W	Full-temperature
Mechanical	Dimensions	180*140*30mm	
	Pigtail Type	SMF	
Communication	Connector	4PIN	
	Level	RS232	
	Interface	Read and Set Parameter	

Parameter	**Min**	**Max**	**Unit**
Working Temperature	-15	+55	℃
Storage Temperature	-20	+70	℃
Related Humidity	5	95	%

For ordering information and custom solutions, please contact us:
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