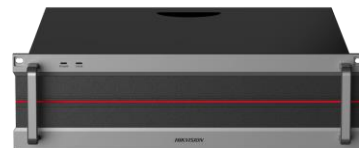


**DS-QFV0502H/R****High Definition Fiber-Optic Vibration Sensing Server 5KM Dual-Ch**

Distributed Positioning Vibration Fiber System is a detection system based on the coherent detection technology. It achieves precise positioning through the optical time domain reflectometry ( $\phi$ -OTDR), combined with a backend data analysis and processing module, enabling effective monitoring of vibrations. Additionally, the device significantly reduces false alarms with smart recognition capabilities for natural environmental interferences.

- Supports dual channel DAS vibration fiber.
- Supports long-distance detection with a single-channel detection distance up to 5 km.
- Supports simultaneous positioning and monitoring of multiple vibration points with high positioning accuracy of  $\pm 0.5$  m, frequency response range from 0.1 Hz to 5 kHz, and alarm response time  $\leq 2$  s.
- Effectively monitors intrusion in different scenarios including climbing, crossing, and excavation, reports information including the alarm type, time, latitude and longitude, and alarm level, and processes alarm events.
- Supports setting parameters for the scenario, sensitivity, and more with the integrated algorithms, achieving an alarm accuracy rate of 97%.
- Strong environmental adaptability. With passive and flexible characteristics, the fiber can be installed in various complex terrains, not restricted by power supply conditions. It can withstand harsh environments such as moisture, temperature variations, and is resistant to ammonia, chlorine, salt spray, acid rain, and more.

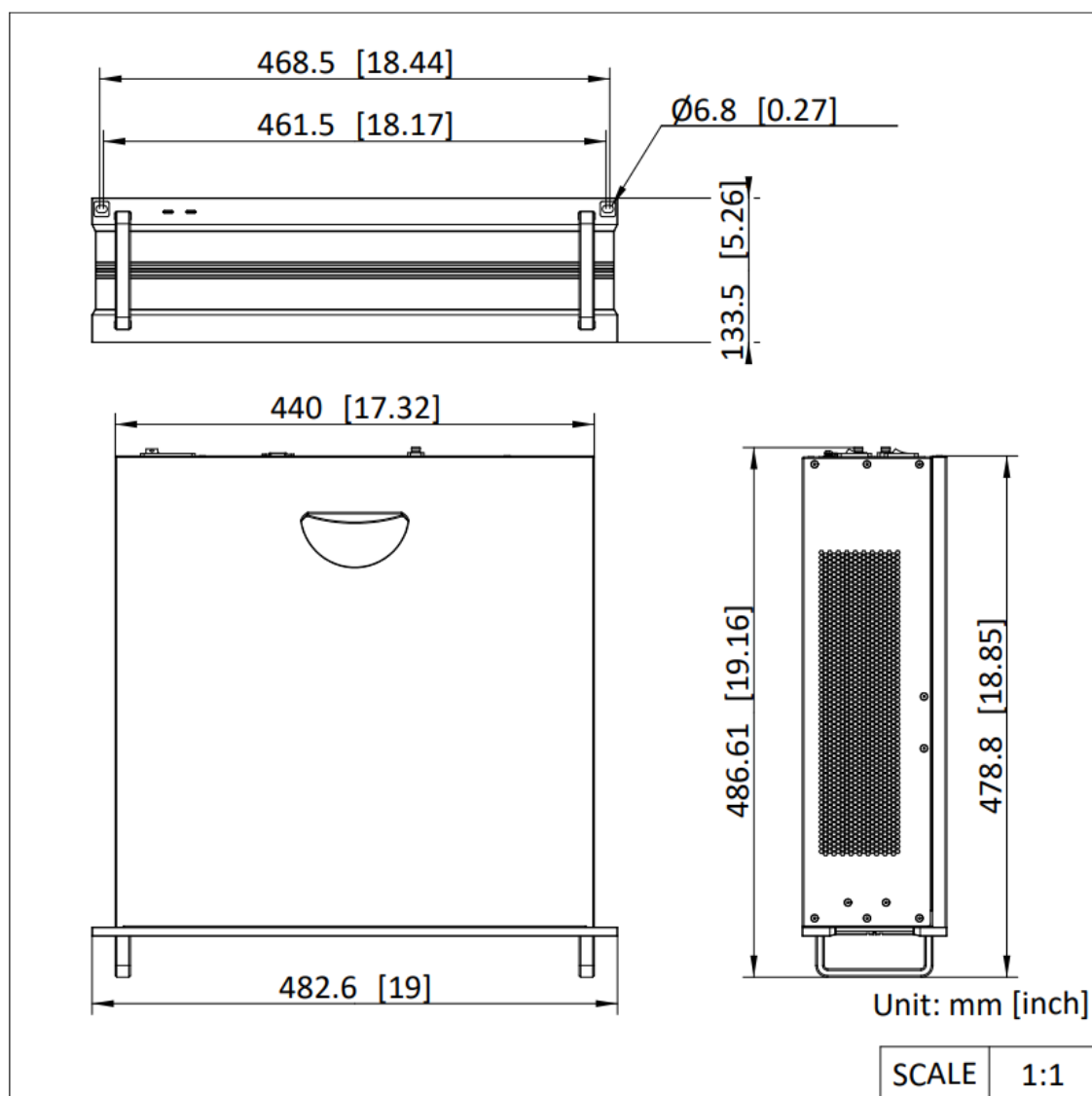
## ▪ Specification

| Basic Parameter                |                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fiber Type                     | Single mode (ITU-T G.652D)                                                                                                                                                                                                                                                                                                                            |
| Channel                        | 2                                                                                                                                                                                                                                                                                                                                                     |
| Single-Channel Detection Range | 5 km                                                                                                                                                                                                                                                                                                                                                  |
| Positioning Accuracy           | 5 km : $\pm 0.5$ m                                                                                                                                                                                                                                                                                                                                    |
| Frequency Response             | 0.1 Hz to 5kHz                                                                                                                                                                                                                                                                                                                                        |
| Recognition Accuracy           | 97%                                                                                                                                                                                                                                                                                                                                                   |
| Unit                           | $\leq 5300$ per channel                                                                                                                                                                                                                                                                                                                               |
| Alarm Response Time            | $\leq 2$ s                                                                                                                                                                                                                                                                                                                                            |
| Function                       |                                                                                                                                                                                                                                                                                                                                                       |
| Alarm Trigger                  | Intrusion alarm, Fiber cut alarm, Tampering alarm                                                                                                                                                                                                                                                                                                     |
| LED Indicator                  | Power indicator:<br>Solid blue: Device is connected to the power supply and powers on<br>Blue light off: Device powers off<br>Status indicator:<br>Solid blue: Device works normally without any error<br>Flashing red: Wired network error<br>Solid red: Device error (including all-in-one model error, FPGA exception, HDD error, tampering alarm) |
| Buzzer                         | Stay buzzing for tampering alarm                                                                                                                                                                                                                                                                                                                      |
| Switch                         | 2 rocker switches for power                                                                                                                                                                                                                                                                                                                           |
| Communication                  |                                                                                                                                                                                                                                                                                                                                                       |
| Communication Method           | Wired communication                                                                                                                                                                                                                                                                                                                                   |
| Interface                      |                                                                                                                                                                                                                                                                                                                                                       |
| Fiber Interface                | 2 FC/APC fiber interfaces                                                                                                                                                                                                                                                                                                                             |
| Power Interface                | 2 power input interfaces with 220 VAC power input                                                                                                                                                                                                                                                                                                     |
| Function Interface             | 1 1000 M network interface,<br>1 RS-232 interface,<br>1 RS-485 interface,<br>2 USB 3.0 interfaces,<br>1 3.5 mm audio interface                                                                                                                                                                                                                        |
| Alarm Out                      | 1 relay output                                                                                                                                                                                                                                                                                                                                        |
| General                        |                                                                                                                                                                                                                                                                                                                                                       |
| Material                       | Metal                                                                                                                                                                                                                                                                                                                                                 |
| Power                          | 220 VAC, 50 Hz, 1 A                                                                                                                                                                                                                                                                                                                                   |
| Color                          | Black                                                                                                                                                                                                                                                                                                                                                 |
| Power Consumption              | $< 120$ W                                                                                                                                                                                                                                                                                                                                             |
| Operating Humidity             | 0% to 93% ( $\pm 2\%$ )                                                                                                                                                                                                                                                                                                                               |
| Laser Classification           | Class 1                                                                                                                                                                                                                                                                                                                                               |
| Dimension                      | 133.5 mm $\times$ 482.6 mm $\times$ 486.61 mm (5.22" $\times$ 19" $\times$ 19.16")                                                                                                                                                                                                                                                                    |
| Package Dimension              | 293 mm $\times$ 575 mm $\times$ 635 mm (11.54" $\times$ 22.64" $\times$ 25")                                                                                                                                                                                                                                                                          |
| With Package Weight            | Approx. 13 kg (28.66 lb.)                                                                                                                                                                                                                                                                                                                             |
| Weight                         | Approx. 11 kg (24.25 lb.)                                                                                                                                                                                                                                                                                                                             |
| Operating Temperature          | -15 $^{\circ}$ C to 55 $^{\circ}$ C (5 $^{\circ}$ F to 131 $^{\circ}$ F)                                                                                                                                                                                                                                                                              |

## ▪ Typical Application

Scenarios: airports, railways, cultural heritage sites, high-end buildings, business parks, schools, and basic facilities for energy, and more.

## ▪ Dimension



# See Far, Go Further



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