15 DPI-01 PORTABLE LASER MICRO-WATER GAGE





Description

The DPI-01 portable laser micro-water meter developed by our company is a portable instrument based on laser absorption spectroscopy to detect the micro-water content in the gas.
Designed dy using the characteristic of the water in the gas for Infrared absorption spectrum, it can complete the measurement within the range of -60℃ ~ -20℃ and ensure that the full scale ± 2 PPM measurement accuracy. Combined with the temperature measured by the temperature sensor, through special circuit design and algorithm processing to compensate for the influence of temperature on the measurement, it can effectively eliminate the detection error caused by aging and drift without the need of frequent calibration.

Features

1. Fiber sensor directly detects water molecule content in SF_6 gas with absolute error of PPM≤±2ppm. Within dew point value scope of SF_6 at application site, it provides better dew point precision. Its precision is ±1℃ at -60℃, ±5℃ at -50℃, ±0.3℃ at -45℃ and ±0.1℃ at -40℃, which fully meet precision requirement of onsite detection.
2. The use of infrared absorption spectrometry for detection, anti-interference ability, "a scanning-based micro-water detection system" has a utility model patents (Patent No .: ZL 2011 2 007 4340.0).
3. . Completely independent development, with independent property rights and related patents.
4 compact structure, small size, easy to carry.
5. Seven-inch high-definition LCD touch screen, touch operation, simple and intuitive.
6 using high-capacity lithium battery, suitable for field operations.
7. Instruments imported gas components, sealing performance is good, no SF_6 gas leak detection process.

Technical parameter

1. Measurement scope: -60℃ ~ +20℃ or 10ppm~1000ppm
2. Precision: ±2PPM
3. Resolution: 0.1PPM
4. Response time: ≤ 3min when dew point reaches -35℃~-60℃
   5-10 minutes when dew point reaches less than -50 ℃
5. Working power supply: Lithium battery, working 8 hours, AC and DC, overcharge protection.
6. Gas intake flow: (0 ~ 2) L / min, the best detection of air flow (0.5 ~ 0.8) L / min.
7. 7-inch color high-definition touch screen display, easy to operate
8. Display parameters: water content (ppmv), dew point (℃), flow rate display (ml / min), measurement temperature (℃), power display (%).
9. Smart battery display.
10. Instrument weight: 8KG;

Configuration

1 set of host
Accessories: 1 piece of long connecting gas pipe with both self-sealing ends (six meter, length can be customized), 1 piece of temperature probe, 1 power cord, 1 piece of inspection record produced 1, 1 piece ofmanual.
Option: A set of tools (including a full set of transition joints).