# **PRODUCT INFORMATION**





# LZ-R155 Leak Tester for Sealed Works

### Enhanced data collection



Capture data through RS-232C port to your PC while testing. Also, collect data via USB port.

# Color LCD



Check the waveforms of test pressure and leak during leak test. Language switchable.

### Overview

All-in-one leak tester suitable for small, sealed works. Ideal for waterproof test of parts and finished products that require IP ratings. By just setting the work, the internal clamping mechanism automatically clamps the work for leak testing. Smaller, lighter and easier to use than previous models.

### Works

| Features        |                                 |  |  |  |  |
|-----------------|---------------------------------|--|--|--|--|
|                 | Display icons                   | Easy operation with icons.   |  |  |  |
| (S)<br>()       | Low running<br>costs            | Uses clean air. No need for pre- and post-<br>test processing such as drying.                                  |  |  |  |
|                 | Suitable for<br>various works   | The capsule is replaceable, so the tester can be used for a wide variety of works.                             |  |  |  |
|                 | Judgment lamp                   | Check the test results with the easy-to-<br>see lamp.  |  |  |  |
| SENSOR          | Differential<br>Pressure Sensor | High-performance DPS and AD converter realize a DP resolution of 0.1 Pa.                                       |  |  |  |
|                 | High-durability<br>air valves   | Air valves for Air Leak Testers ensure stable measurement and durability.                                      |  |  |  |
| र्ध्र<br>द्विस् | Gross leak test                 | Testing electronic parts in combination<br>with a helium detector achieves leak<br>testing without dead zones. |  |  |  |

#### **Functions**

| Display                            | 3.5-inch color LCD   |  |  |  |
|------------------------------------|--|--|--|--|
| Leak limit setting                 | Two-level limit setting:<br>Work Large/Small NG (HH/Hi-NG)<br>Master Large/Small NG (LL/Lo-NG) |  |  |  |
| Drift Compensation                 | Mastering, Auto Drift Compensation   |  |  |  |
| Self-check                         | Air operated valve operation,<br>Sensor offsets, CPU operation, etc.                           |  |  |  |
| Mastering Request<br>Signal output | Max Idle Time, Day of Week,<br>Interval, Iteration   |  |  |  |
| Multiple Channels                  | Channel no. (0 to 31), Channel Copy  |  |  |  |

|                      |                     | Pa, kPa, mL/s, mL/min, L/min, Pa∙m³/s, E-3                |  |  |
|----------------------|---------------------|---|--|--|
| Unit selection       | Leak                | Pa∙m³/s, Pa/s, Pa/min, *Pa/s, *Pa/min                     |  |  |
|                      |                     | (Non-SI units: mmH <sub>2</sub> O, mmHg, inH2O, etc.)     |  |  |
|                      | Test Pressure       | kPa, MPa  |  |  |
|                      | Test Pressure       | (Non-SI units: kg/cm <sup>2</sup> , PSI, bar, mmHg, etc.) |  |  |
|                      | Equivalent Internal | mL, L   |  |  |
|                      | Volume              | (Non-SI units: in <sup>3</sup> , ft <sup>3</sup> )        |  |  |
| DET Judgment Timing  |                     | End of DET, Abort at Limit                                |  |  |
| Serial communication |                     | Format selection (T/ID/P/D/L2/ID2),<br>Baud rate change   |  |  |

## **Specifications**

| sure                  | Minimum resolution     | 0.1 Pa   |  |  |  |
|-----------------------|------------------------|--|--|--|--|
| Differential Pressure | Display range          | ± 999.9 Pa(Accuracy guaranteed range ±1000<br>Pa)  |  |  |  |
| enti                  | Range                  | ±2.5% of rdg ±1 Pa, 50 Pa or less: ±2 Pa   |  |  |  |
| Differ                | Sensor<br>overpressure | 5 MPa  |  |  |  |
| units                 | Test pressure          | kPa, MPa<br>(PSI, kg/cm², bar, mbar, mmHg, cmHg, inHg)   |  |  |  |
| Display units         | Leak                   | Pa, kPa, mL/s, mL/min, L/min, Pa·m³/s, E-3<br>Pa·m³ /s, Pa/s, Pa/min, *Pa/s,*Pa/min<br>(mmH <sub>2</sub> O, inH <sub>2</sub> O, mmHg, in³/min, in³/d, ft³/h) |  |  |  |
| Leak                  | display                | 4 digits, Sampling rate 10 times/s   |  |  |  |
| Leak                  | limits                 | ± 999.9 Pa or less   |  |  |  |
| Num<br>Char           | ber of<br>inels        | 32 ch (0 to 31)  |  |  |  |
| Time                  | r setting range        | 999.9 s (Resolution: 0.1 s)  |  |  |  |
| Powe                  | er source              | 100 to 240 VAC ±10%, 50/60 Hz,100 VA max<br>(The included power cable must be used at<br>125 VAC or less) (Internal solenoid power<br>source 24 VDC)         |  |  |  |
| Test<br>sourc         | pressure<br>ce         | Use clean air sufficiently higher than the test pressure.  |  |  |  |

| Pilot pressure                       |                       | Use clean air in the range of 400 to 700 kPa.                 |  |  |  |  |
|--------------------------------------|-----------------------|---|--|--|--|--|
| sour                                 | ce                    | Use clean all in the range of 400 to 700 kFa.                 |  |  |  |  |
| Port                                 |                       | Rc 1/4 (Pressure source, Work and Master ports,               |  |  |  |  |
| Port                                 | size                  | Pilot pressure port)  |  |  |  |  |
| CPU                                  |                       | SH-2A 144 MHz DRAM 8 MB                                       |  |  |  |  |
|                                      | ronmental<br>perature | 5 to 40 °C  |  |  |  |  |
| Hum                                  | idity                 | 80 %RH or less / no dew condensation                          |  |  |  |  |
| Weight                               |                       | Approx. 36 kg   |  |  |  |  |
| Serial port                          | ID2 Format            | Outputs data on leak limits as well as large and small leaks. |  |  |  |  |
|                                      | L2 Format             | Outputs L-DET and S-DET leak data.                            |  |  |  |  |
| S                                    | Others                | Four types  |  |  |  |  |
| m                                    | Data                  | Judgment, Leak, Test pressure, CH#, Timers, etc.              |  |  |  |  |
| USB                                  | Parameter<br>output   | Test parameters of all settings screens                       |  |  |  |  |
| Char                                 | al a wal fitti a wa   | Filter regulator for pilot pressure,                          |  |  |  |  |
| Standard fittings<br>and accessories |                       | Interface connectors, Power cable (3 m),                      |  |  |  |  |
|                                      |                       | Inspection Record, Operation Manual                           |  |  |  |  |
| Optio                                | onal                  | High voltage power cable (250 V 2 m),                         |  |  |  |  |
|                                      | ssories               | Parameter sheet for export                                    |  |  |  |  |
|                                      |                       | •   |  |  |  |  |

#### **External Appearance**



The contents in this Product Information are as of October 2024. Specifications are subject to change without notice.

## Cosmo Instruments Co., Ltd.

2974-23 Ishikawa, Hachioji, Tokyo 192-0032 Japan

http://www.cosmo-k.co.jp/

### Phone: +81-(0)42-642-1357 Fax: +81-(0)42-646-2439

|            |   |             | •    | •                   |   |   | ( )                     |                     |
|------------|---|-------------|------|---------------------|---|---|-------------------------|---------------------|
| China:     | Cosmo Instruments (China, Jia   | axing) Co., | Ltd. | +86-(0)573-82800886 | Vietnam:                                    | Cosmowave Vietnam Co., Ltd.                       |                         | +84-(0)24-37876085  |
|            | Shanghai Office, Tianjin Office, Guangzhou Office, Chongqing Office, Changchun Office, Wuhan Office |             |      | India:              | Cosmo Instruments India Pvt. Ltd. Head Offi | ce  | +91-(0)124-421-0946     |                     |
| Korea:     | Cosmo Korea Co., Ltd. Inched  | on Office   |      | +82-(0)32-623-6961  |   | South Zone Regional Office, Pune - Chakan Office, | Chennai Office, Gujarat | t Office            |
|            | Changwon Office   |             |      | +82-(0)55-264-1358  | Germany:                                    | Cosmo EU Solutions Technology GmbH                |                         | +49-212-38367171    |
| Taiwan:    | Taiwan Cosmo Instruments Co   | ., Ltd.     |      | +886-(0)2-2707-3131 | USA:  | Cosmo Solutions Technology, Inc.                  |                         | +1-248-488-2580     |
|            | Taichung Office   |             |      | +886-(0)4-2270-2286 | Mexico:                                     | Cosmo De Mexico, Silao Office                     |                         | +52 (472) 117-2157  |
| Malaysia:  | COSMOWAVE SDN. BHD.   |             |      | +60-(0)3-51626677   |   | Monterrey Office                                  |                         | +52 (81) 1104-2479  |
| Thailand:  | Cosmowave Technology Co., I   | _td.        |      | +66-(0)2-7361667    | Brazil:                                     | Tex Equipamentos Eletronicos Ind. Com. Lto        | la.                     | +55-(0)11-4591-2825 |
| Indonesia: | Pt. Cosmowave   |             |      | +62-(0)21-89328750  | Australia:                                  | Industrial Research Technology Pty. Ltd.          |                         | +61-(0)412-176-674  |