Index

Pasteurization Temperature Monitor ................................................................. 3
CAN-85B Pasteurization Temperature Monitor ...................................................... 3
CO₂ Meter. ............................................................................................................. 5
KZJ-AS-200d Digital AutoShaker Beverage CO₂ Calculator ............................... 5
KZJ-AS-100 AutoShaker Beverage CO₂ Meter ..................................................... 6
KZJ-DGM-100 Digital Beverage CO₂ Calculator .................................................. 7
KZJ-GMT-100 Beverage CO₂ Meter ..................................................................... 8
KZJ-GCD Gauge Calibration Device ................................................................. 9
KZJ-BCC-200 Beverage CO₂ Calculator ............................................................ 10
KZJ-Inpack 3000 CO₂ Meter .............................................................................. 11
KZJ-7001 CO₂ Tester and Pressure Tester ....................................................... 12
KZJ-5001 CO₂ Tester and Pressure Tester ....................................................... 13
KZJ-5000 Air Meter ......................................................................................... 14
L-100 CO₂ Purity Tester .................................................................................. 15
Pasteurization Temperature Monitor

CAN-85B Pasteurization Temperature Monitor

Attributes

- High accuracy
- Temperature data logger with 2 sensor, 1 for sample, 1 for spray water
- Readout via Interface CAN-TR and Processor CAN-200P, independent of pc
- Can also Readout via Interface CAN-TR and PC
- Programming via PC
- Powerful software CND-LogSee
- Completely waterproof
- Stainless steel housin
- Temperature resistant up to 85°C
- Factory calibration certificate
<table>
<thead>
<tr>
<th>Technical data (Changes reserved):</th>
<th>The temperature monitoring system for pasteurization, consisting of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Measuring range:</td>
<td>● Temperature data logger CAN-85B-**, needle length **mm,</td>
</tr>
<tr>
<td>CAN-85A : -20 ... +85°C</td>
<td>● Interface CAN-TR</td>
</tr>
<tr>
<td>● Resolution: 0.1°C</td>
<td>● Software CND-LogSee</td>
</tr>
<tr>
<td>● Accuracy: ±0.3°C</td>
<td>● Adapter CAN-BFL</td>
</tr>
<tr>
<td>● Sensor: Pt100, internal</td>
<td>● Base CAN-BBAS</td>
</tr>
<tr>
<td>● Measuring rate: from 5s ... 8 h, adjustable</td>
<td>● Case</td>
</tr>
<tr>
<td>● Memory: 16,000 readings (if Measuring rate is 5s, record for 22 hours)</td>
<td>Option: Pasteurization Temperature Monitor</td>
</tr>
<tr>
<td>● Measuring mode: endless, Start/Stop or Start with preset measuring rate</td>
<td>Processor CAN-200P</td>
</tr>
<tr>
<td>● Sample type: bottle and can</td>
<td></td>
</tr>
<tr>
<td>● Battery: 3.6 V Lithium</td>
<td></td>
</tr>
<tr>
<td>● Weight: 250 g</td>
<td></td>
</tr>
</tbody>
</table>

Temperature data logger CAN-85B and Base CAN-BBAS

Interface CAN-TR

Option: notebook

Case

Option: Processor CAN-200P
CO₂ Meter.

KZJ-AS-200d Digital AutoShaker Beverage CO₂ Calculator

The "KZJ-AS-200d Digital AutoShaker Beverage CO₂ Calculator" calculates the carbon dioxide content in the filled drink in glass/PET bottles and cans.

The simple operation which guarantees high reproducibility have led to its becoming a significant element of Quality Assurance in the drinks industry.

Attributes
• rotate by motor, avoid shaking by hand, guarantees high reproducibility
• with protection drum, more safety
• the CO₂ content is calculated automatically and digitally displayed.
• measurement Just need 3 minutes
• simple operation
• available for most common glass bottle PET bottle and cans.

The operation involves putting the sample drink in the in the protection drum, piercing the caps, rotation by motor so that phase equilibrium is obtained after the end of the shaking process, and the carbon dioxide content is calculated from the temperature and pressure.

The even rotation overturning the bottle provides optimum release of the dissolved carbon dioxide and is the basis for the excellent reproducibility of the measurement results.

For air determinations the IAM Air Meter can be combined with "KZJ-AS-200d Digital Autoshaker Beverage CO₂ Calculator".
• Determination of air content in the headspace volume,
• Determination of total air content in the beverage.

Technical data:
Measuring range:
CO₂: 2.50 - 9.99 g/L
(0.25-1.00 gew.% ,1.25-5.00 % V/V)
Temperature: -10 - +60 °C
Press: -1- + 6 bar
Accuracy:
CO₂: +/-0.10 g/L
Temperature: +/-0.2°C
Press: +/-0.01 bar
Sample capacity:110 mm dia max.
360mm height max. (bigger by order)
Power supply: 115 V / 230 V
Dimensions: 200 x 130 x 400 mm(W x D x H)
Net Weight: 2 kg
KZJ-AS-100 AutoShaker Beverage CO₂ Meter

The “KZJ-AS-100 AutoShaker Beverage CO₂ Meter” calculates the carbon dioxide content in the filled drink in glass/PET bottles and cans. The simple operation which guarantees high reproducibility have led to its becoming a significant element of Quality Assurance in the drinks industry.

Attributes
- Rotate by motor, avoid shaking by hand, guarantees high reproducibility
- With protection drum, more safety
- Measurement just need 3 minutes
- Simple operation
- Available for most common glass bottle PET bottle and cans.

The operation involves putting the sample drink in the in the protection drum, piercing the sample, rotation by motor so that phase equilibrium is obtained after the end of the shaking process, and the carbon dioxide content is calculated from the temperature/pressure relationship charts furnished with this instrument.

The even rotation overturning the bottle provides optimum release of the dissolved carbon dioxide and is the basis for the excellent reproducibility of the measurement results.

For air determinations the IAM Air Meter can be combined with “KZJ-AS-100 AutoShaker Beverage CO₂ Meter”.
- Determination of air content in the headspace volume,
- Determination of total air content in the beverage.

Technical data:
- CO₂ Measuring range: 0 - 9.99 g/L
  (0-1.00 gew.%,0-5.00 % V/V)
- Temperature Measuring range: 0 - +50 ℃
- Press Measuring range: 0- + 6 bar
- Temperature Resolution: +/-0.1℃
- Press Resolution: +/-0.1 bar
- Sample capacity: 110 mm dia. max.
- 360mm height max. (bigger by order)
- Power supply: 115 V / 230 V
- Dimensions: 500 x 400 x 700 mm(W x D x H)
- Net Weight: 20 kg
KZJ-DGM-100 Digital Beverage CO₂ Calculator

General information
For a constant quality and taste of all sorts of carbonated drinks, the critical parameter is the content of the dissolved CO₂ (carbon dioxide) in the liquid. Therefore it is common in breweries and soft drink industry to frequently measure the CO₂ content during production. The portable Digital CO₂ Gehaltemeter, type KZJ-DGM-100, enables a fast and accurate determination of the CO₂ content in beer and carbonated drinks, either directly sampled within the production process (from e.g. tanks, pipes) of thereafter (from e.g. kegs).

Principle of operation
During sampling of the beverage, the liquid flows through the instrument. By closing the lever a measurement cycle starts up, creating an electrolysis followed by pressure and temperature measurement and electronical calculating of the CO₂ content, which is consecutively displayed. Within only four steps an accurate, traceable CO₂ content can be achieved:
- Connect to the sampling point,
- Pull the lever to allow a sample flow,
- Depress the lever to start a measurement,
- Read the displayed CO₂ content.

Technical data:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Range/Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring range</td>
<td>CO₂: 0 - 19.99 g/L (0-1.99 gew.%, 0-9.99 % V/V)</td>
</tr>
<tr>
<td></td>
<td>Temperature: -10 - +60 °C</td>
</tr>
<tr>
<td></td>
<td>Press: -0.5 - 4 bar</td>
</tr>
<tr>
<td></td>
<td>Accuracy: CO₂: +/-0.10 g/L</td>
</tr>
<tr>
<td></td>
<td>Temperature: +/-0.2°C</td>
</tr>
<tr>
<td></td>
<td>Press: +/-0.03 bar</td>
</tr>
<tr>
<td>Max. operation</td>
<td>Press: 5 bar</td>
</tr>
<tr>
<td>Max. operation</td>
<td>temperature: 60 °C</td>
</tr>
<tr>
<td>Measurement</td>
<td>between 2 charging operations: up to 80 measurements</td>
</tr>
<tr>
<td>Battery</td>
<td>12V,200mA</td>
</tr>
<tr>
<td>Charge voltage</td>
<td>110-250V/50-60Hz</td>
</tr>
<tr>
<td>Dimensions</td>
<td>275 x 75 x 190 (H x W x D in mm)</td>
</tr>
<tr>
<td>Weight</td>
<td>Total: ca. 3.0 kg</td>
</tr>
<tr>
<td>Charging time</td>
<td>8 hours</td>
</tr>
</tbody>
</table>
KZJ-GMT-100 Beverage CO₂ Meter

General Information
For a constant quality and taste of all sorts of carbonated drinks, the critical parameter is the content of the dissolved CO₂ (carbon dioxide) in the liquid. Therefore, it is common in breweries and soft drink industry to frequently measure the CO₂ content during production.
The portable Beverage CO₂ Meter, type KZJ-GMT-100, enables a fast and accurate determination of the CO₂ content in beer and carbonated drinks, either directly sampled within the production process (from e.g. tanks, pipes) of thereafter (from e.g. kegs).

Principle of Operation
During sampling of the beverage, the liquid flows through the instrument. By closing the lever a measurement cycle starts up, creating an electrolysis. The pressure can be read from the manometer and the temperature from the thermometer. By means of a slide rule the CO₂ content can be quickly determined.
Within only 4 steps the CO₂ content can be achieved:
- Connect to the sampling point,
- Pull the lever to allow a sample flow,
- Depress the lever to start a measurement,
- Read the pressure and temperature and determine the CO₂ content with the slide rule.

Technical data:
Measuring range:
CO₂: 0 – 12.0 g/L
(0.2-1.20 gew.% ,1.0-6.0 % V/V)
Thermometer: -2.0 – 20.0 ºC
Manometer: 0.0 - 2.5 bar (option 4.0 bar)
Accuracy:
Temperature: +/-0.5 ºC
Press: 1%
Line pressure: Max 5.0 bar
Battery:9V
Dimensions: 275 x 75 x 190 (H x W x D in mm)
Weight: 2.4 kg
KZJ-GCD Gauge Calibration Device

General information
The Gauge Calibration Device, type GCD is a dedicated precision instrument for calibrating pressure gauges and digital pressure sensors.
It is a universal applicable device for all kinds of pressure calibrations.
As the CO₂ content determination depends on the measurement of both the equilibrium pressure and the temperature, an accurate and reliable measurement of the pressure is essential, to avoid errors in the measurement of the CO₂ content.
The Gauge Calibration Device has a compact and recognizable design, is user-friendly and can multi-functionally be applied in breweries and soft drink industry. The calibration of measurement devices, more and more, needs to be traceable, because laboratory analyses depend on it.
Therefore the Gauge Calibration Device was developed for traceable calibrations of pressure gauges and digital pressure sensors, compliant with international standards.
The Gauge Calibration Device is an essential basic tool breweries and soft drink industry need in their operations. Wherever a pressure is measured, the simple question “…when and how often do you check…?” or “how reliable is your measurement?” is raised.

Principle of operation
The operation of the Gauge Calibration Device is extremely simple. Just apply a compressed gas on the inlet, attach the pressure measurement device that needs to be checked on the outlet, set the desired pressure by the reducing valve and compare it with the reading. If necessary, adjust your pressure measurement, following the instructions of the manufacturer and check it again with the Gauge Calibration Device.

Technical data
Pressure gauge: 0 – 0.6 Mpa
Pressure gauge accuracy: Class 0.4 (0.4%)  
Pressure gauge graduation: 0.005Mpa
Dimensions: 320 x 304 x 200 (H x W x D in mm)
Weight: 5.5 kg

*CanNeed reserves the right to make changes in the technical specifications at any time.
KZJ-BCC-200 Beverage CO₂ Calculator

General information
For a constant quality and taste of all sorts of carbonated drinks, the critical parameter is the content of dissolved CO₂ (carbon dioxide) in the liquid.
That is why it is common for breweries and the soft drinks industry to frequently measure the CO₂ content of carbonated beverages filled in glass and PET bottles and cans.
Having a compact, ergonomic and modular design, the CanNeed “KZJ-BCC-200 BEVERAGE CO₂ CALCULATOR” is user-friendly and fast to operate by operators in breweries or soft drinks laboratories.

Principle of operation
In practice, the CanNeed “KZJ-BCC-200 BEVERAGE CO₂ CALCULATOR” is used in two ways:
1 The bottle or can is directly placed onto the instrument and then shaken by hand.
2 The bottle or can is shaken until equilibrium pressure is achieved, and then placed onto the instrument. After this, the handle is pulled forward and the sample is pierced.
The pressure transducer measures an absolute pressure to eliminate errors caused by variations in atmospheric pressure. A pt-100 temperature sensor measures the temperature. With the equilibrium pressure and the temperature, the CO₂ content is calculated and digitally displayed.

For air determinations the IAM Air Meter can be combined with “KZJ-BCC-200 BEVERAGE CO₂ CALCULATOR”.
• Determination of air content in the headspace volume,
• Determination of total air content in the beverage.

Technical data:
Measuring range:
CO₂ value: 2.5 - 9.99 g CO₂ /l
(1.25-5.00 % V/V, 0.25-1.00 gew.%)
Temperature: -10.0 - 60.0 °C
Pressure: -1.0 - 6.0 bar
Accuracy:
CO₂ value: ± 0.10 g CO₂ /l
Temperature: ± 0.20 °C
Pressure: ± 0.01 bar
Charge voltage: 110-250V/50-60Hz
Sample capacity: 120 mm dia. max. 360mm height max. (bigger by order)
Dimensions: 550 x 170 x 250 (H x W x D in mm)
Weight: Total: 2.8 kg
The “CanNeed Model KZJ-Inpack 3000 CO2 Meter ” is used to measure the CO2 content in carbonated beverages filled in glass and PET bottles and cans.

The “KZJ-Inpack 3000 CO2 Meter ” is in practice used in two ways. Either the bottle or can is directly placed onto the instrument and then shaken by hand. Or the bottle or can is shaken until equilibrium pressure has been achieved, followed by placing it onto the instrument.

Once the bottle or can is placed in the “KZJ-Inpack 3000 CO2 Meter “, the handle is pulled forward and the sample is pierced consecutively.

The pressure is read on the pressure gauge, as soon as the equilibrium pressure is achieved. The bottle or can may then be removed from the instrument to measure the temperature of the liquid with a thermometer. The CO2 content is determined by means of the CO2 slide rule or temperature/pressure relationship charts.

For air determinations the IAM Air Meter can be combined with "KZJ-Inpack 3000 CO2 Meter".

- Determination of air content in the headspace volume,
- Determination of total air content in the beverage.

**Technical data:**

- CO2 Measuring range: 0 - 9.99 g/L (0-1.00 gew.%, 0-5.00 % V/V)
- Press Measuring range: 0 - +0.6 Mpa
- Temperature Measuring range: 0 - +50 °C
- Press Resolution: +/-0.01Mpa
- Temperature Resolution: +/-0.1°C
- Sample capacity: 120 mm dia max.
- Dimensions: 550 x 170 x 250 (H x W x D in mm)
- Weight: Total: 2.4 kg
- Sample capacity: 360mm height max. (bigger by order)
The "CanNeed KZJ-7001 CO2 tester and Pressure Tester" is used to measure the CO2 content in carbonated beverages filled in glass and PET bottles and cans.

Once the bottle or can is placed in the tester, the handle is pulled forward and the sample is pierced consecutively. The pressure is read on the pressure gauge, as soon as the equilibrium pressure is achieved. With a dial thermometer install with model KZJ-7001-T, the temperature of the liquid is read at the same time. With model KZJ-7001, the bottle or can may then be removed from the instrument to measure the temperature of the liquid with a separate thermometer. The CO2 content is determined by means of the CO2 slide rule or temperature/pressure relationship charts.

For air determinations the IAM Air Meter can be combined with KZJ-7001 or KZJ-7001-T.
• Determination of air content in the headspace volume,
• Determination of total air content in the beverage.

Technical data (Changes reserved):
Press Measuring range : 0-0.6Mpa
Press Resolution : 0.01 Mpa.
Temperature Measuring range : 0-50℃
Temperature Resolution :
0.5℃ (dial thermometer at KZJ-7001-T),
0.1℃ (separate thermometer at KZJ-7001)
Sample capacity :
90 mm dia. max (KZJ-7001), 330mm height max.
120 mm dia. max..( KZJ-7001-T) ,330mm height max
Dimensions : 200 x 130 x 400 mm (W x D x H)
Net Weight : 2 kg
The “CanNeed KZJ-5001 CO2 tester and Pressure Tester” is used to measure the CO2 content in carbonated beverages filled in glass and PET bottles and cans.

Once the bottle or can is placed in the Tester, the sample is pierced. The pressure is read on the pressure gauge, as soon as the equilibrium pressure is achieved. With a dial thermometer install with model KZJ-5001-T, the temperature of the liquid is read at the same time. With model KZJ-5001, the bottle or can may then be removed from the instrument to measure the temperature of the liquid with a separate thermometer. The CO2 content is determined by means of the CO2 slide rule or temperature/pressure relationship charts.

For air determinations the IAM Air Meter can be combined with KZJ-5001 or KZJ-5001-T.

- Determination of air content in the headspace volume,
- Determination of total air content in the beverage.

**Technical data (Changes reserved):**
Press Measuring range : 0-0.6Mpa
Press Resolution : 0.01 Mpa
Temperature Measuring range : 0-50°C
Temperature Resolution : 0.5°C (dial thermometer at KZJ-5001-T), 0.1°C (separate thermometer at KZJ-5001)
Sample capacity : 102 mm dia. max. 330mm height max.
Dimensions : 200 x 130 x 400 mm(W x D x H)
Net Weight : 2 kg
KZJ-5000 Air Meter

The "CanNeed KZJ-5000 Air Meter " is used to measure total air content in carbonated beverages filled in glass and PET bottles and cans. And the air content in the headspace volume. This instrument is recommended for testing air content where greater speed and accuracy is required. It is automatically adjustable to various size bottles and cans.

The volumes of CO₂ gas may be determined by taking the maximum pressure reading during the test and then, immediately after the test, inserting a laboratory thermometer into the sample and recording the temperature. The CO₂ content can be determined from any standard temperature/pressure relationships chart using the above information.

Technical data (Changes reserved):
Air content Measuring range : 0-30ml
Air content Resolution : 0.05ml.
Press Measuring range : 0-0.6Mpa
Press Resolution : 0.01 Mpa
Sample capacity : 102 mm dia max. 330mm height max.
Dimensions : 200 x 130 x 400 mm(W x D x H)
Net Weight : 2 kg
The Canneed "L-100 CO₂ Purity Tester" consists of a caustic reservoir and calibrated absorption burette mounted to a PVC polished frame. The reservoir and burette are held to the frame with two neoprene covered mounting bands that are adjustable from the rear side of the frame. The absorption burettes are available in five different calibrations, with the standard burette graduated in tenths of one percent, the total being one percent of the volume of the burette. The caustic reservoir has a line indicating the level to which caustic solution should be added, which volume is slightly in excess of the capacity of the absorption burette.

**Technical data (Changes reserved):**

- **Measuring range**: 99.0%~100%, v/v CO₂
- **Accuracy**:
  - 99.980%~100% : 0.001%
  - 99.80%~99.97% : 0.01%
  - 99.00%~99.75% : 0.05%
- **Dimensions**: 250 x 250 x 80 mm (L x H x W)
- **Net Weight**: 0.75 kg
Canneed Instrument (HongKong) Limited
19/F Hang Wai Comm Bldg, 231-233 Queen'S Rd East Wan Chai, Hongkong
China Headquarters: Room 1-3, No.66, Heping Road, Zhaoqing, P.R.China
Zip code:526060, Tel: +86-758-2153978, 2938185  Fax: +86-758-2782729
Email: info@canneed.com, http://www.canneed.com