

DIGITAL PRESSURE GAUGE

MANUAL

I. NOTICE

1. Please check the packaging and appearance after you received the product.
 2. Please check the mode and specification of the product. Keep correct electrical connection and mounting method.
 3. Power: three pieces of AA battery or USB-power.
 4. During using, please notice the technical and operation conditions: the temperature of medium, burst pressure, power supply.
 5. This product is a precision device, DO NOT use hard objects to touch the diaphragm or disassemble.
 6. During installation, do not install or disassemble strongly, especially the installation of thread.
 7. Please install or disassemble with a suitable wrench. Otherwise, the damage is not in the scope of warranty.
 8. After starting the gauge, it is a normal phenomenon to take a few minutes to keep it stable and work normally.
 9. If the product is out of order, please contact our after-sale technical staff.
 10. During installation, the gauge will be affected by installation stress. After installation, please zero clearing.
- (!) Product damage caused by non-professional operations that are not in accordance with the operating instructions is not covered in the warranty.

II. WARNING

1. This product is a precision instrument, it should be regularly calibrated or submitted to ensure the accuracy of the product.
2. Product storage should be moisture and dust, as far as possible in the dry and normal temperature environment.
3. The company does not undertake any direct or indirect loss other than the product itself.
4. The company reserves the right to change the specifications of the product without notice.

III. DESCRIPTION

The high-precision digital pressure gauge is a high-precision pressure gauge that can rotate 330°. It uses split-screen display on the main screen and the secondary screen. While the main screen displays real-time pressure, the split-screen displays the ambient temperature, maximum pressure, and minimum pressure. Reference data such as measuring range.

The product has powerful functions and can switch between multiple common pressure unit displays. The pressure collection rate is adjustable, the collected data can be recorded, and the recorded data can be exported through a type-c data cable or Bluetooth function. Various parameters can be set through Bluetooth function or buttons.

The device comes standard with type-c external power supply, optional type-c external power supply + 3 AAA battery power supply mode or type-c external power supply + rechargeable battery power supply, multiple power supply modes, more convenient to use.

☆ Original imported pressure sensor, accuracy 0.05%, 0.1%, 0.2% optional

☆ Dial can rotate 330°

☆ Can record up to 270,000 pieces of data, and can export data through a computer or Bluetooth app

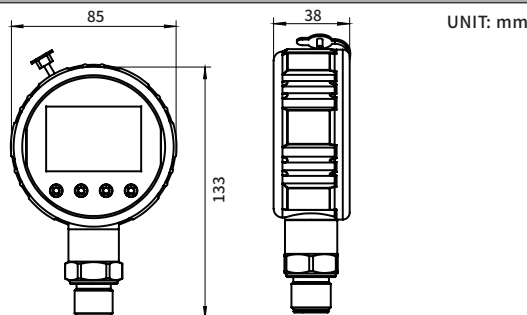
☆ Multiple power supply modes: optional type-c external power supply + 3 AAA battery mode or type-c external power supply rechargeable battery power supply

☆ Up to 10 pressure units can be switched, with a wider range of applications Bluetooth function: can set various parameters and export recorded data

IV. SPECIFICATION

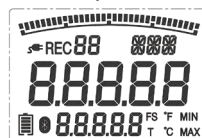
Pressure range: 0.1MPa...0~1...10...40...70MPa (for specific range, see the label on the device)
Overload pressure: 150%
Backlight color: green
Dial size: 85mm
Accuracy grade: 0.05%, 0.1%, 0.2% (for the specific range, see the marking on the equipment label)
Output signal: without
Long-term stability: better than 0.05% FS/year
Working temperature: -5~40°C
Electrical protection: anti-electromagnetic interference design
Sampling frequency: 0.1~10 times/second
Measuring medium: gas or liquid compatible with 316 stainless steel
Connection thread: M20*1.5 G1/4" or customized thread
Connection material: 304 stainless steel
Rotation angle: 330° degree
Product function: Power on/off, backlight, clear, unit switching, extreme value display, temperature display, range display, data recording and export functions
Power supply voltage: 3 AAA batteries + type-c external power supply; rechargeable + type-c external power supply
Shell material: cast zinc
Protection class: IP65 (IP67 optional)
Frequency: 2402-2480 MHz
Transmit Power: -0.12 dBm

V. DIMENSION



VI. BUTTON

6.1 LCD screen and code description:



Code	Description
	Pressure percentage bar
	Power supply
REC 88	The number of data recorded
	Pressure unit
88.88.8	Main Screen: Current Pressure Value
	Battery power
	Bluetooth

88.88.8

	Secondary screen: current temperature/ extreme values
FS	Pressure range
T	Temperature sign
°F	Temperature: Fahrenheit
°C	Temperature: Celsius
MIN	Pressure minimum
MAX	Maximum pressure

6.2 Key and function description:

Button	Name	Button & function description
	Power	Short press to turn on, long press to turn off, power on state, short press to turn on the backlight
UNIT/MENU	Unit/Set	Short press to switch units; long press to enter parameter setting interface
MODE/ZERO	Mode/Zero clear	Short press to switch to secondary screen mode, long press to clear the device
SET/REC	Confirm/Record	Short press to confirm settings and exit; long press to enter or exit the recording function

VII. POWER SUPPLY

This product can be powered in two modes, battery or USB.

Battery power	Powered by 3 AAA batteries or a rechargeable battery pack. When the battery indicator alarms, the batteries need to be replaced/charged in time.
USB power supply	Adopts type-c power supply, and the power supply is 5V * This product comes with a standard power cord (5V, 0.15A) * The product is equipped with power management, plug into the type-c port without removing the battery.

For battery replacement:

First remove the protective cover, there are 3 screws on the back cover, after removing it, open the back cover, you can see the battery, just replace it.

VIII. FUNCTION DESCRIPTION

8.1 Change device parameters

Long press the UNIT/MENU button and P0 will appear. At this time, press this button continuously and the following table code will appear; short press the MODE/ZERO button to set the function parameters; short press the SET/REC button to save the settings and return to the pressure display. home page:

Code	Function	Description
P0	Automatic switch on and off	This function is turned off by default. After the function is turned on, the device will automatically shut down after 5 minutes of no key operation.
BLE	Bluetooth function	It is turned on by default. After turning it on, you can use the Bluetooth function to turn it off. After turning it off, you cannot use Bluetooth.
RATE	Acquisition rate	Default is 0.3 seconds, can be changed from 0.1 to 10 seconds.
FLTR	Filter coefficient	Default 5, can be changed to 1~7 times
E000	Full scale compensation	Default 1.000, 0.500~1.500
rES	Reset	
DEL	Clear storage	Click the SET button to clear all recorded data

8.2 Change device time device

To change the time, you can accurately record the time. The specific operation is as follows. Press and hold the UNIT/MENU key and MODE/ZERO key at the same time until the YEAR page appears. This page is the year setting. At this time, short press the UNIT/MENU key number. Decrease, press the UNIT/MENU key briefly, the number will increase, and the year is set. At this time, press the key continuously, nntH (month), dAY (day), HOUr (hour) nit (minute), SEC (second) will appear respectively.) ; Change the same way as the year: After setting the time, press the SET/REC key briefly to save the settings and exit.

Note: After the device is connected to Bluetooth, it will automatically obtain the current time and save it to the device without pressing the button to set it.

8.3 Record data export

- There are two situations for exporting recorded data:
1. Export through the standard data cable: There is a USB port on the device. Connect it to the computer through the data cable. A folder will appear on the computer in which the recorded data is stored.
 2. Export through APP Bluetooth function: see 9 for tutorial details.

IX. BLUETOOTH DESCRIPTION

1. This product can be debugged through on-site WeChat mini programs and APP clients. The set parameters include: data collection frequency, current pressure data, reset function, etc.
- ① Android: Open "Google Play" on your Android phone, search for "SECA" to download the app.
- ② iOS: Open the "App Store" on your iOS phone and search for "SECA" to download the app



SECA



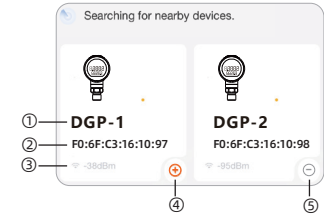
Android/iOS

Both of the above methods can search for devices, just connect.

Note: To ensure the normal connection of the mobile phone to the device, please keep the cellular data, positioning, and Bluetooth functions on at all times.

2. After installing "SECA", device debugging can be carried out through the following operations:

2.1 Main interface composition



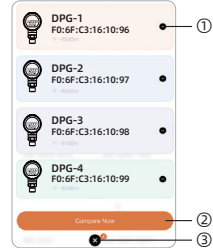
- ① : Equipment model name.
- ② : Device MAC address.
- ③ : Bluetooth communication signal situation, the larger the value, the worse the signal.
- ④ : Connect the device.
- ⑤ : Remove the device.

2.2 Sub interface composition



- Note:**
- ① Under the secondary interface, the version number of the software function can be viewed.
- ② Users can switch app languages in the language function menu.
- (After selecting, you need to restart the app)

2.3 Multi device connection group mode



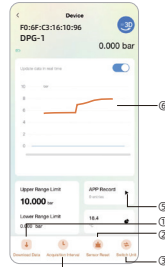
- Note:**
- ① : Remove added devices
- ② : Enter data comparison
- ③ : Click to switch to the device addition interface
- *Up to 4 different Bluetooth devices can be added to the same group.

2.4 Data observation under multi device connection



- Note:**
- ① : Users can click the play button to enable/disable remote data recording. The final mobile phone will organize the collected data into EXCEL format.

2.5 Single device connection mode



- Note:**
- ① : Read technical data from device history.
- ② : Sensor zeroing operation.
- ③ : Unit switching.
- ④ : Modify the equipment data acquisition interval.
- ⑤ : Enable/disable remote data recording.
- ⑥ : Pressure line chart.

2.6 Data export mode

- Note:**
- ① In data export mode, the exported data includes parameters such as collection time, real-time pressure situation, serial number, etc.
- ② The total amount of exported data is related to the collection time and sampling frequency.
- ③ The larger the amount of data, the longer the export time. If the exported data exceeds 1000 at a time, please ensure that the digital pressure gauge and mobile phone maintain Bluetooth communication at all times.

X. CODE DESCRIPTION

NO	SYMBOL	MEANING
1	BLE	Bluetooth function, you can use Bluetooth debugging after turning it on
2	E-H	The current pressure exceeds the range or the sensor is damaged
3	RATE	Sensor sampling interval setting
4	E000	Display error correction coefficient setting
5	FILt	Filter constant settings
6	MAX	Maximum value identifier
7	MIN	Minimum value identifier

XI. PROBLEM & SOLUTION

NO.	PROBLEMS	REASONS	SOLUTIONS
1	The backlight is very dim	Battery is low	Replacement battery
2	Pressure does not change	1. The pressure hole is blocked 2. Caused by pressure clearing 3. Sensor damaged	1. Check the pressure hole 2. Reset without pressure 3.Return to factory for repair
3	Display E--H	1. Pressure exceeds range block 2. The sensor is damaged	1. Be careful not to overpressure 2.Return to factory for repair
4	Value jumps too slowly	Adjust filter constants	See nine items at 2 points
5	Value jumps too fast	Adjust filter constants	See nine items at 2 points
6	Frequent shocks of pressure	1. Easily damage the sensor 2. Easily cause leakage	Add buffer tube
7	There is high temperature on site	1. Easily damage the pressure gauge 2.Cause pressure deviation	Add heat pipes/fins

XII. AFTER-SALES SERVICE

1. After-sales service and warranty terms

The product warranty period is 24 months from the date of delivery. If our company's products fail during normal use within 7 days from the date of sale, consumers can choose refunds, exchanges, maintenance and other services. After consumers purchase our company's products, they can be repaired free of charge within two years if there is a failure that is not caused by human damage. The purchase time is based on the invoice or receipt date issued at the time of purchase.

For consumers who are not satisfied with the free replacement or free warranty service, our company still provides technical services.

2. The following situations do not qualify for the "Three Guarantees" service

- 1) All damage caused by human factors and use in abnormal working environment, failure and damage caused by not using according to the instructions or using in an environment not specified in the instructions, etc.;
- 2) Users dismantle, repair, and modify products without the consent of our company;
- 3) Damage caused by poor transportation after purchasing our products;
- 4) Damage caused by other force majeure (such as floods, lightning strikes, earthquakes, abnormal voltage);
- 5) Normal use, wear, cracking and contamination, etc.;
- 6) The products are mainly divided into shells, circuit boards and pressure-sensitive components. The normal wear and tear of the shell is not covered by warranty, and the shell will not be replaced. Over-range use or high-temperature use will cause circuit board damage and are not covered by warranty. The warranty does not cover damage to the pressure-sensing element caused by overpressure or touching the membrane with hard objects;
- 7) Products that do not belong to our company (such as fakes);
- 8) Failure to provide valid shopping receipts, no warranty card, etc.;
- 9) Some accessories are not covered by the three guarantees, such as batteries, etc. If there is any damage, please purchase accessories for this product.

Warning:

Do not disassemble the product without authorization!
It is strictly forbidden to insert sharp objects into the pressure-inducing hole!

XIII. FCC WARNING

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1)This device may not cause harmful interference.

(2)This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

RF exposure statement(uncontrolled environment)
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

XIV. MANUFACTURER INFORMATION

Company Name: Shanghai XZT Fluid Technology Co.,LTD
Address: Room 2019,No. 5475,WenChuan Road,Baoshan,Shanghai,China