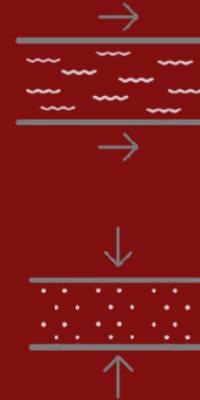




**COLTRACO**  
Ultrasonics | since 1987

# PORTASONIC® CALCULATOR



Tablet-based Flow to Pressure Calculator  
using flow rate results from the Portasonic®



# PORTASONIC® CALCULATOR

The only instrument capable of determining the pressure required to drive fluids at a specified flow speed

PN: 2618949-CALC

Software on robust 7" electronic tablet giving the world's first capability in calculating the pressure required to pump a liquid along a pipe that is travelling at the flow speed measured by the Portasonic®



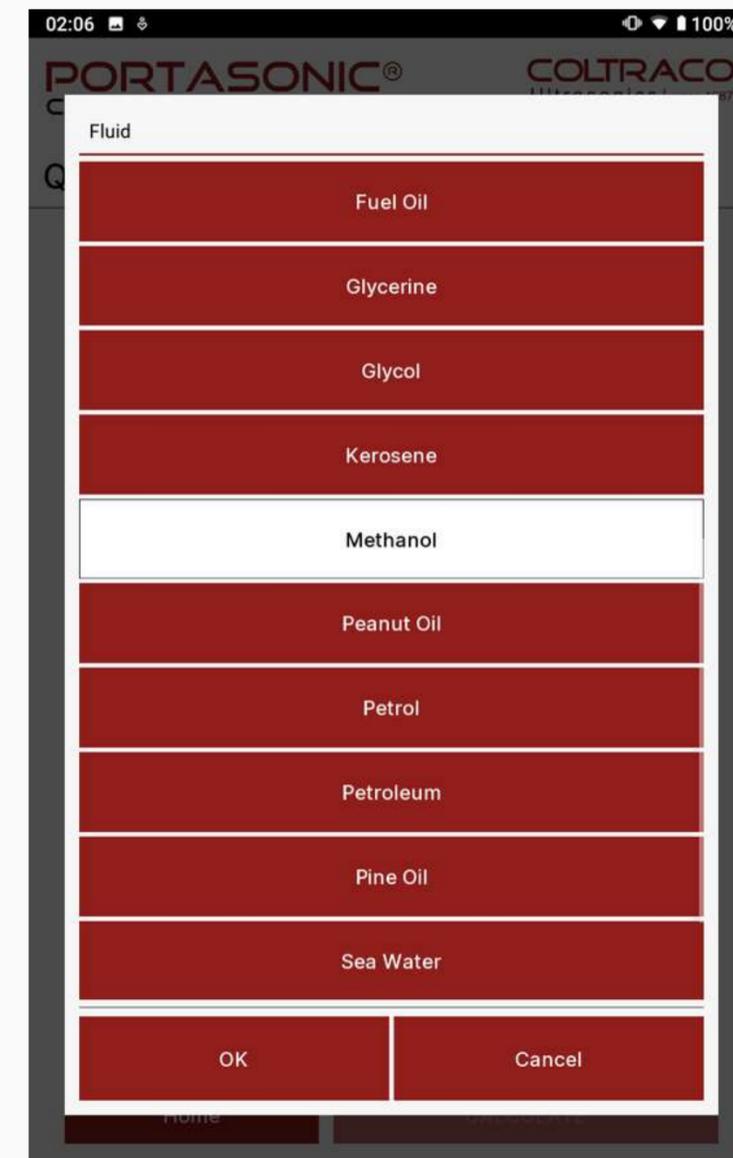
## FOR PORTASONIC CUSTOMERS

The perfect product to save your flow and pressure results for better reporting. Combine calculated pressure with readings from the Portasonic® 2.FLO to verify measured flow speeds and rates against a fixed pressure gauge in the system

## MULTI-PURPOSE

Works on 23 different common pipe materials: ABS, aluminium, asbestos, carbon steel, cast iron, cement, copper, ductile iron, epoxy, fibre glass, glass, GRP, lead, nylon, PE, PP, PTFE, PVC, rubber, stainless 403, stainless 316, steel, Teflon

## 19+ FLUIDS



# PORTASONIC® CALCULATOR

## INTUITIVE



Calculate quickly and easily using an intuitive touchscreen tablet

## CLEAR RESULTS



Save data to records and export via USB or email to ensure traceability

## ACCURATE



Accounts for temperature and material roughness to produce results of the highest empirical accuracy

02:08 100%

**PORTASONIC®** CALCULATOR **COLTRACO** Ultrasonics | since 1987

Calculate - Example Pipe

Pipe Name: Example Pipe	Inner Diameter: 35 mm
Material: Cast Iron	Entrance Height: 1.5 m
Length: 10.2 m	Exit Height: 2.1 m

Fluid	Crude Oil
Temperature (°C)	43
Flow Speed (m/s)	11

Gauge Pressure: 5.912 Bar

Calculate

Save Record

View Records

Home

## REPORTING



Save the results from your Portasonic® 2.FL0; record and download inspection reports. Filter records by date or by pipe

## RELIABLE



Facilitate determination of the expected wear and tear on the system caused by pressure

Facilitate risk assessment of high pressure systems

## ACCURATE

Provides a non-invasive alternative to pressure gauges

## FLOW RATE

Combine with the Portasonic® to verify flow speeds and rates

## SAFE

Determine if your pipe is pressurised to within a safe tolerance

## INNOVATIVE

Ergonomic design, lightweight, easy to use for all skill levels

# ACCURACY

Portasonic CALCULATOR uses an empirical equation which closely models the fluid dynamics in a pipe system using real-life industry data.

**The calculated pressure is accurate to within  $\pm 5\%$**  excepting the following caveats:

- This accuracy is for clean pipes, free of internal corrosion and residue build-up.
- It is also valid for temperatures between 10°C and 30°C.
- Temperatures outside of these bounds will, for the most part, still yield results of a similar accuracy, but these are as yet unverified.
- Some graded liquids are listed under a general name, for example, crude oil.
- These take median values for the liquid properties, which will not necessarily be accurate for all grades.
- Manufacturer Disclaimer: the software is designed under COVID-19 conditions

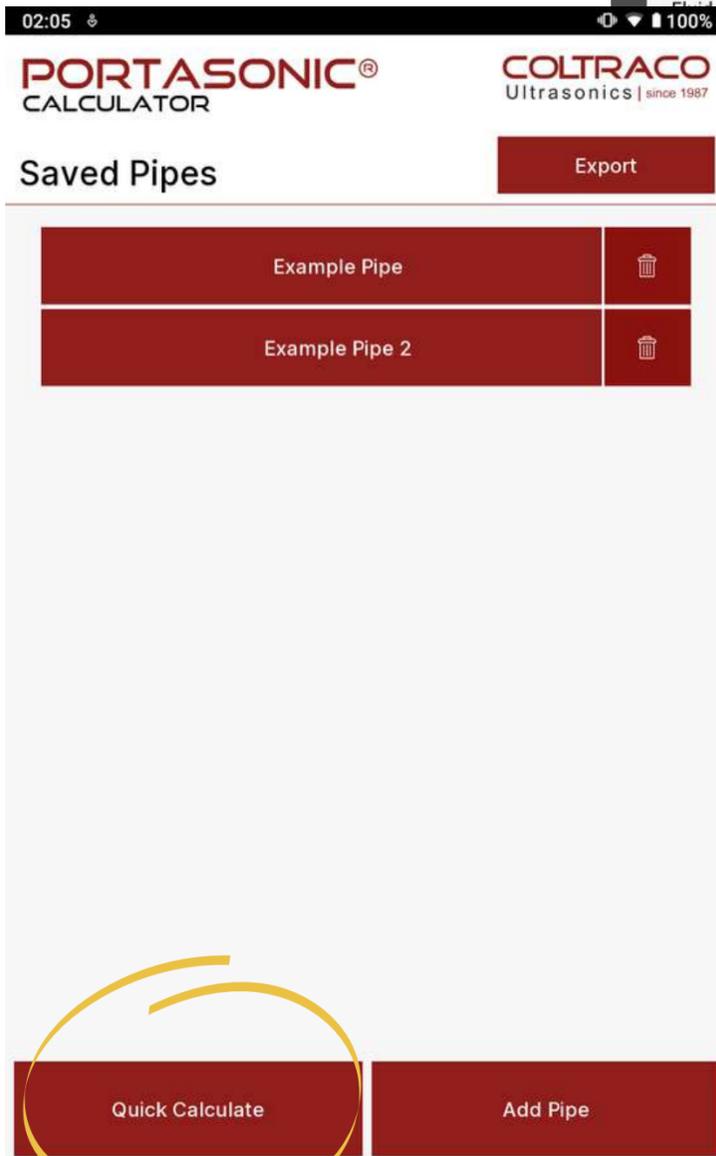
# WHY DOES PRESSURE MATTER?

The pressure in a pipe system must be closely monitored to ensure it does not exceed safe tolerances. Critically high pressures can lead to pipe failure, damage to property, and risk to personnel. The durability and safe functioning of pipes, pumps, and related equipment are also affected by pressure. Knowledge of the pressure in a pipe system is therefore important for ensuring that the flow is occurring as expected, in a safe and sustainable manner.

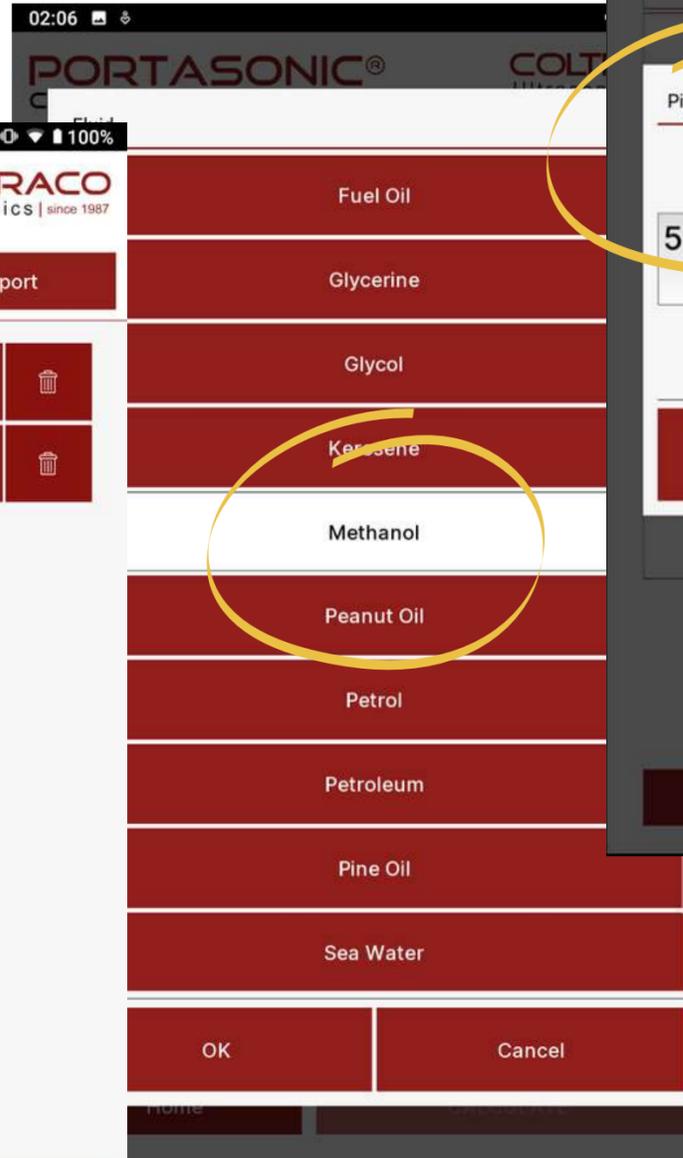
- Portasonic® CALCULATOR is a non-invasive alternative to pressure gauges, which may require costly installation in difficult to reach places.
- It is, therefore, the only way of quantifying the pressure in any system where the flow speed is known, but there is no apparatus installed for pressure measurement.
- It can be used with all of your pipes to store records, thereby creating a centralised database of all past tests – **perfect for ensuring reliable, traceable reporting.**

# HOW TO TEST 1

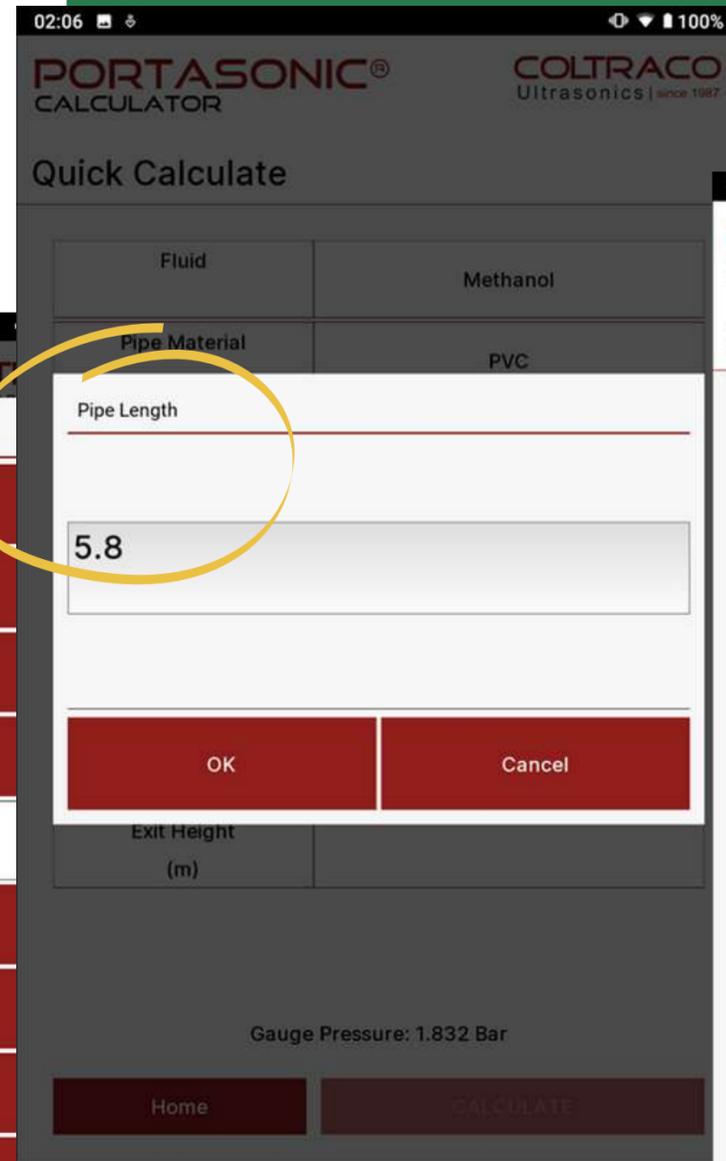
Follow the yellow circles for the key steps:



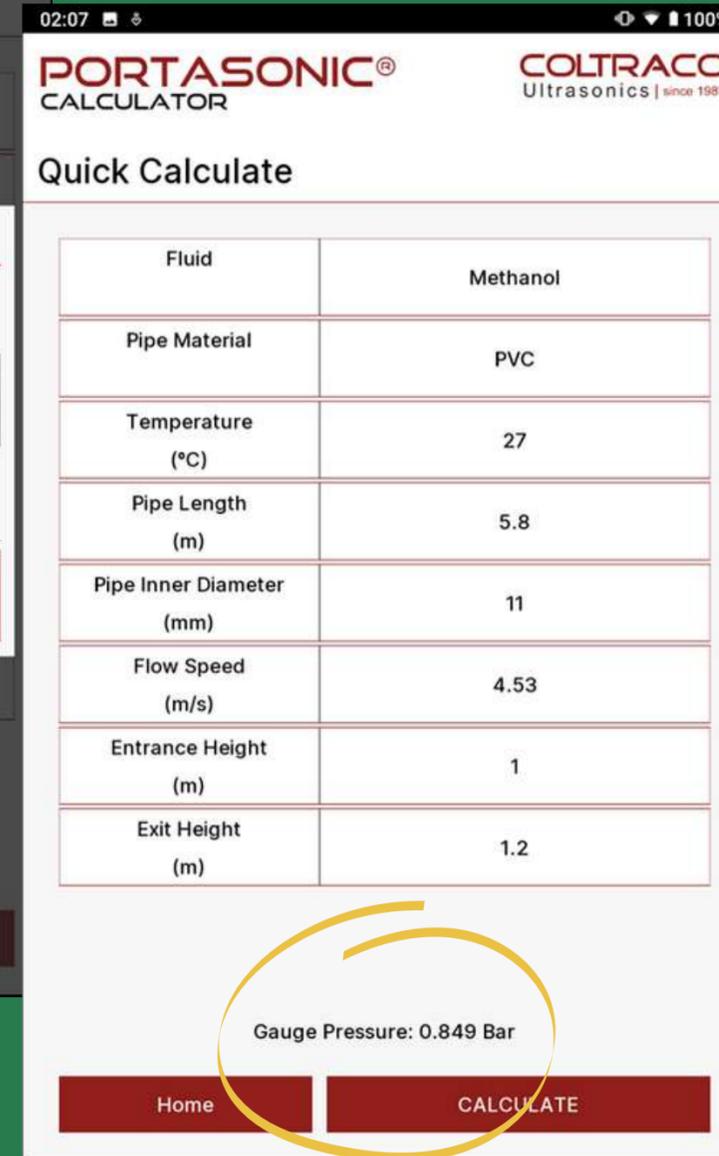
1. Select: Quick Calculate



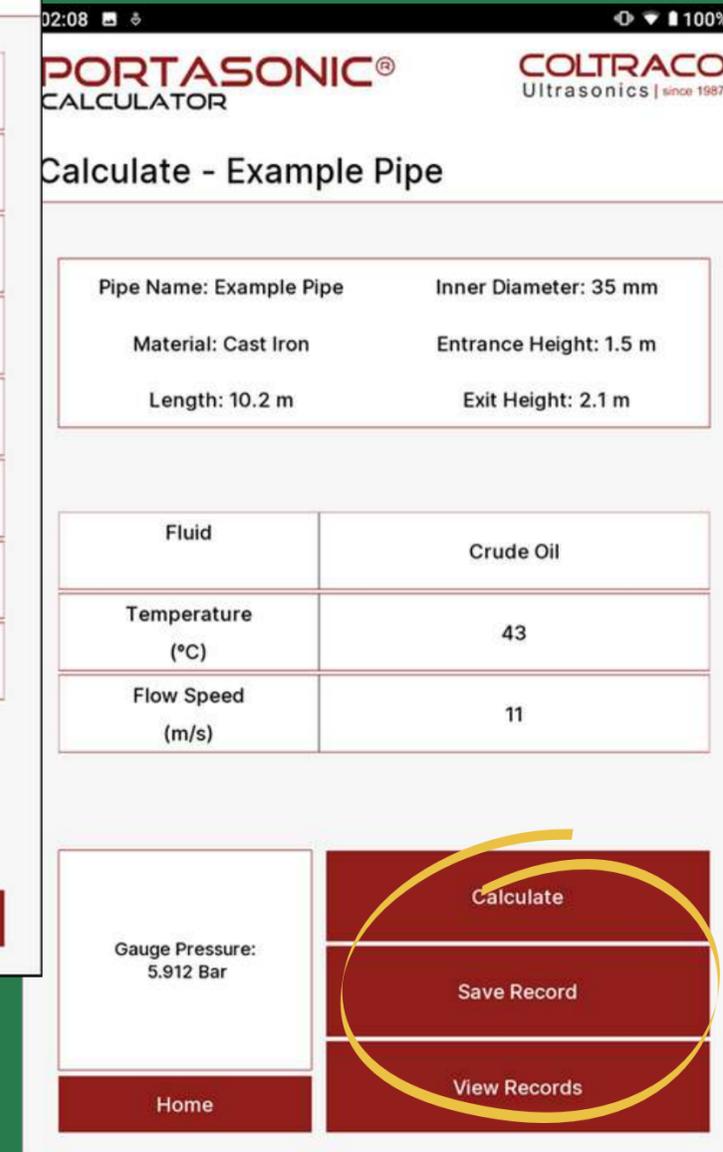
2. Select: Fluid Type



3. Enter: Pipe Length

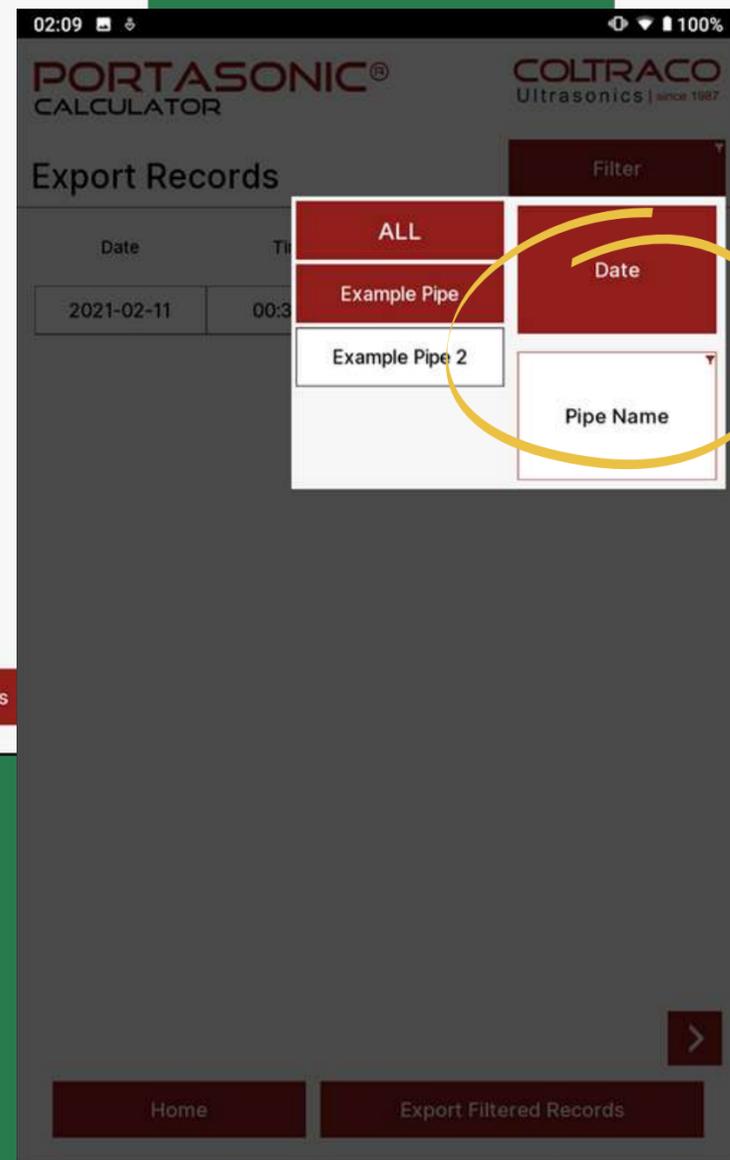


4. Enter: all measurements to allow device to automatically calculate the Pressure (bar)



5. Choose to calculate, save records or view existing records

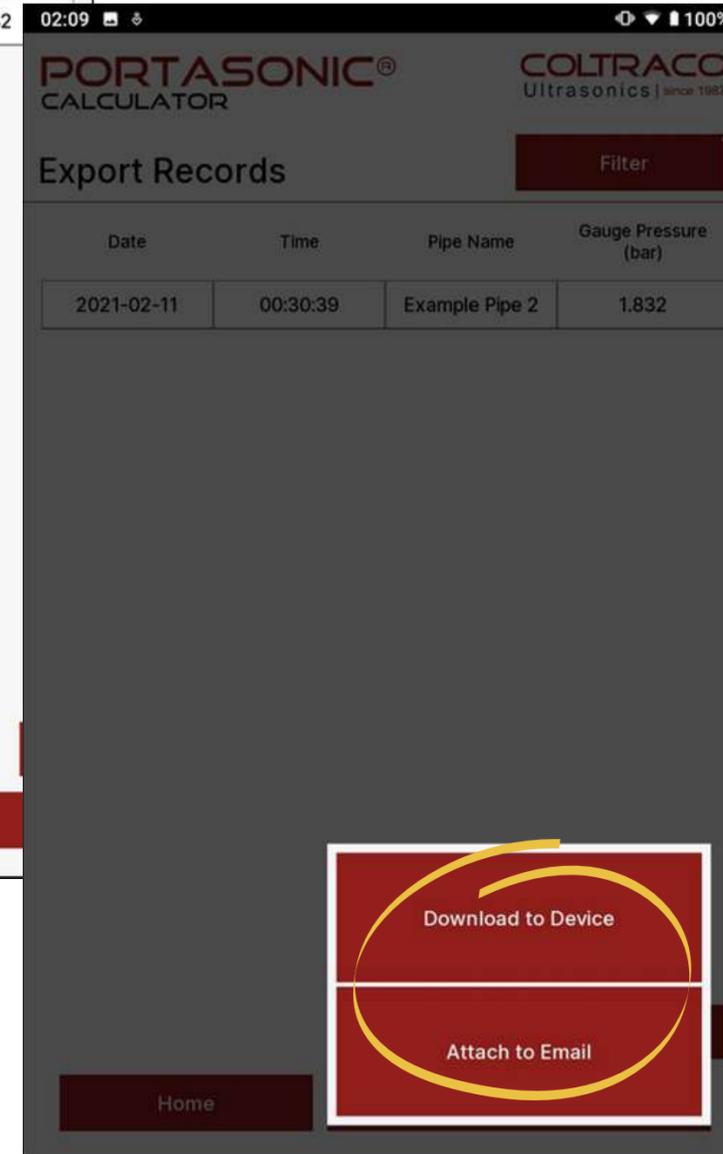
# HOW TO TEST 2



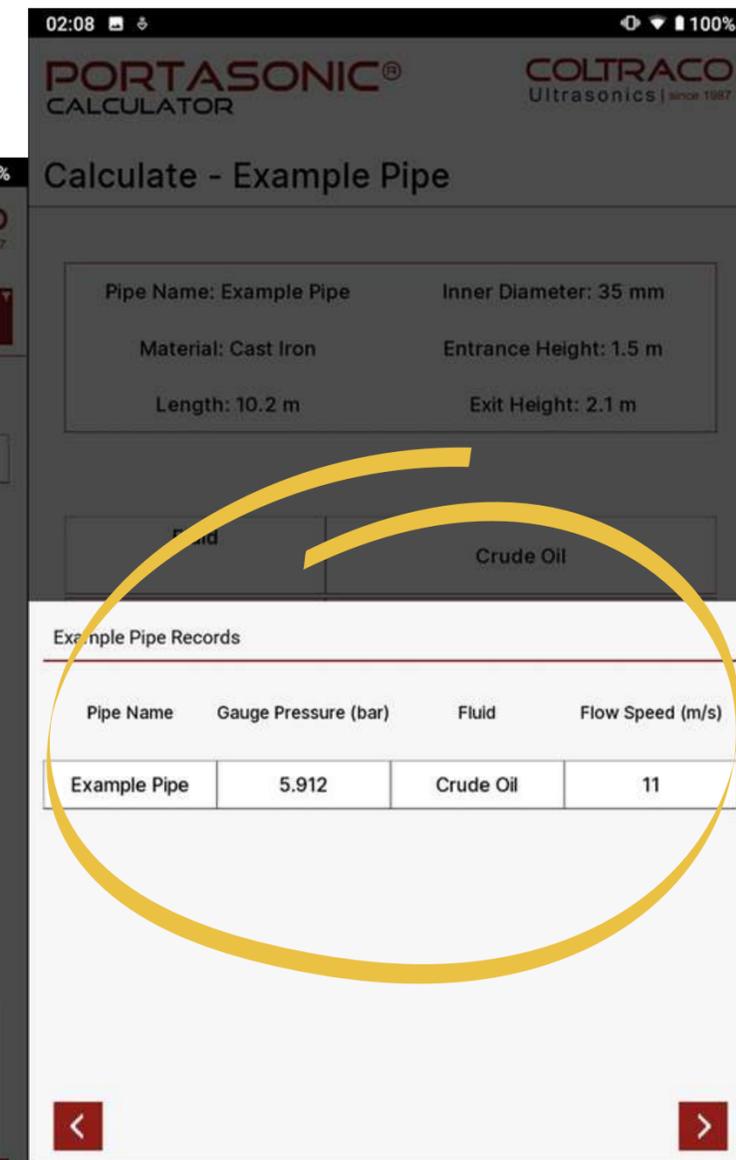
7. Filter by date and pipe name



8. Export filtered records



9. Choose download option or attach to email



10. Test complete with summary details: pipe name, pressure (bar), fluid type and flow speed (m/s)

6. Choose to filter records

# TECHNICAL SPECIFICATIONS

<b>DIMENSIONS</b>	215.6x135.8x18.9mm
<b>WEIGHT</b>	558grams
<b>WATERPROOF LEVEL</b>	IP67 waterproof
<b>MATERIAL</b>	PC+TPU
<b>BAND</b>	2G:GSM 850/900/1800/1900MHz 3G:WCDMA 900/1800/2100MHz 4G:FDD-LTE B1/B3/B5/B7/B8/B17/B20/B66/B71/B28A/B; TDD-LTE: B38/B39/B40/B4
<b>SIM CARD</b>	Dual SIM card dual standby (1 micro + 1 nano)
<b>CPU</b>	MT6762 Cortex A53 octa core, 2.0GHz; GPU: PowerVR GE8320, 650MHz
<b>OS</b>	Android 9.0
<b>DATA TRANSFER</b>	USB Type-C/BT
<b>SPEAKER</b>	φ23 loudspeaker, 1 watt
<b>FM RADIO</b>	Yes, need to plug in earphone
<b>SCREEN</b>	7.0 inch HD IPS capacitive touch screen, 1280x800px

<b>RAM</b>	4GB RAM
<b>ROM</b>	64GB ROM, support TF card up to 128GB maximally
<b>CAMERA</b>	Double cameras, front 2.0MP camera, 13.0MP back camera with flashlight
<b>WIFI</b>	Yes, IEEE802.11 a/b/g/n/ac, support 2.4GHz/5GHz dual band WiFi
<b>GPS</b>	Yes, also supports A-GPS/GLONSS/BDS
<b>BT</b>	V4.0
<b>NFC</b>	Support, 13.56MHz
<b>SENSOR</b>	Geomagnetic sensor, light sensor, proximity sensor, gravity sensor, gyro sensor
<b>I/O PORTS</b>	1x SIM card slot; 1x TF card slot; 1x Micro USB port; 1x 3.5mm earphone jack
<b>BATTERY</b>	Built-in 8000mAh rechargeable Li-ion battery
<b>STANDBY TIME</b>	Up to 200 hours
<b>OTHER FEATURES</b>	Calculator, Calendar, Email, WiFi hotspot, OTG function, E-compass etc.
<b>LANGUAGES</b>	English
<b>COLOUR</b>	Black & Yellow

# PACKAGE

**Portasonic® CALCULATOR is delivered in a package with everything required to carry out testing:**

7 inch handheld tablet

Plus accessories:

1x USB Cable

1x Hand Strap

1x USB Charger

1x Mini Screwdriver

1x User Manual

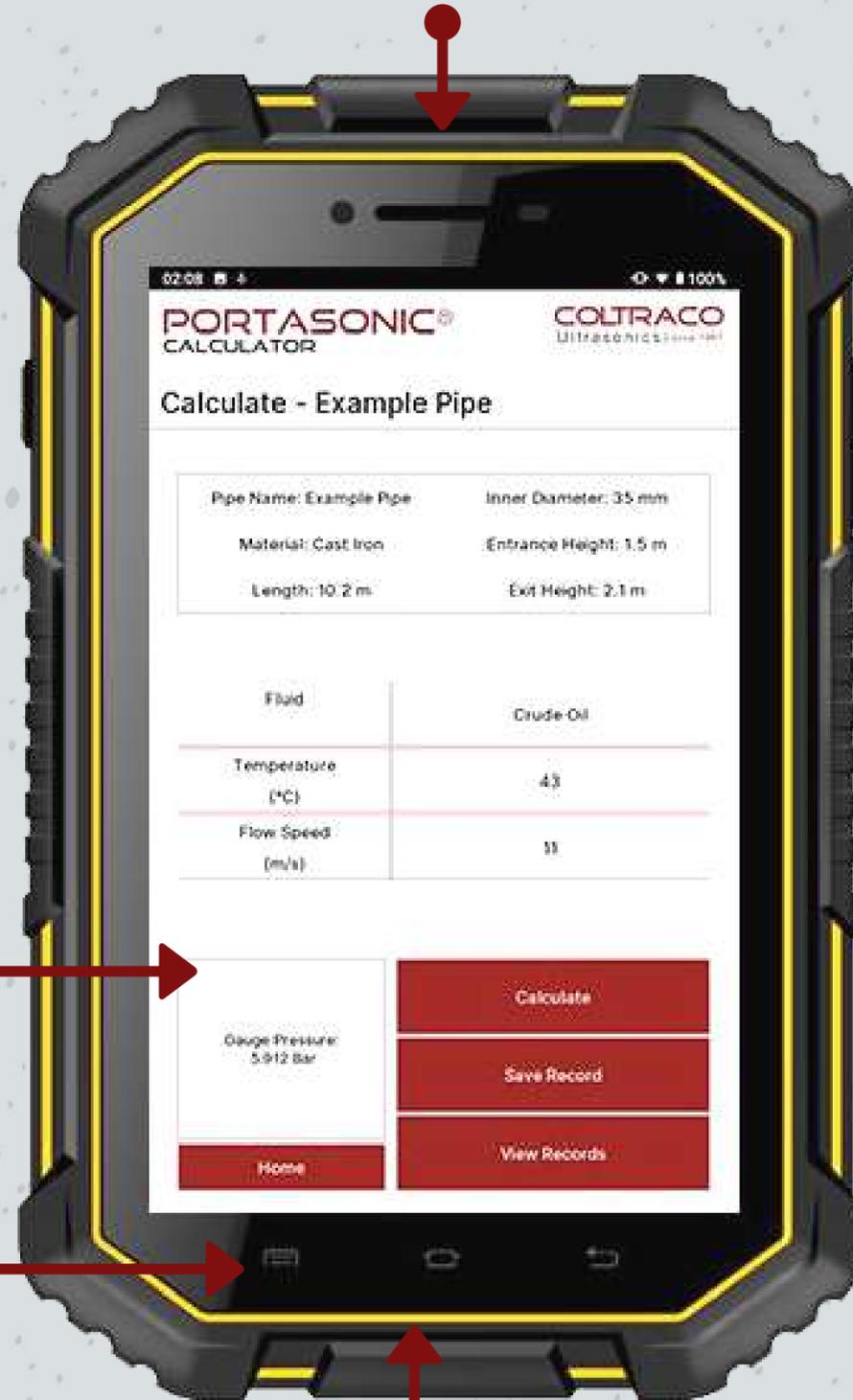
Capacitive Touch Display

Recent Apps Button

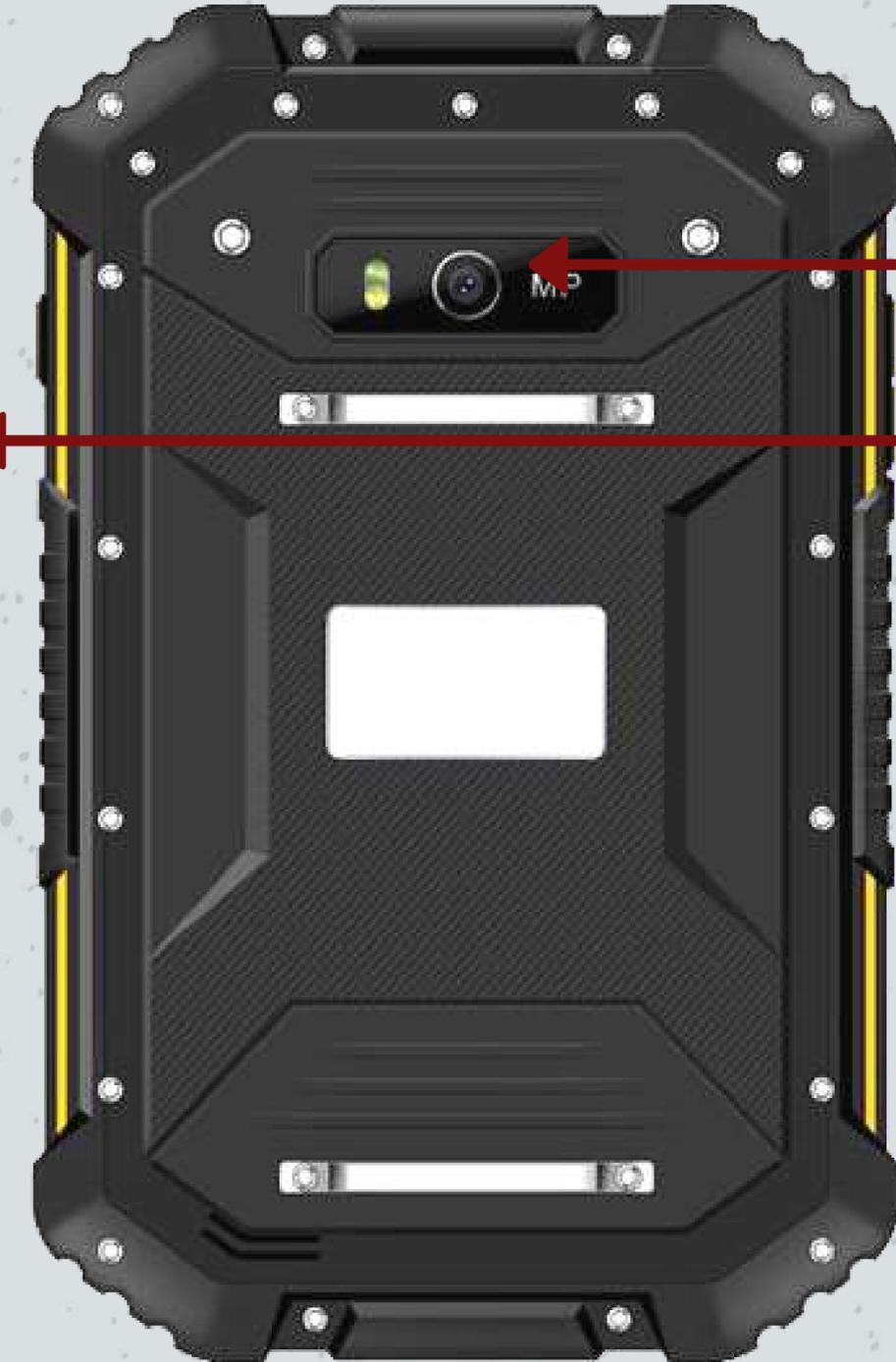
Home Button

Back Button

Power Button



USB Type-C Port



13 MP back camera

Volume buttons

*Manufacturer Disclaimer: the software is designed under COVID-19 conditions*

# CUSTOMER CARE COMMITMENT

Technical Support provided free of charge for the unit's lifetime. Every unit provided by Coltraco comes with a 3 year warranty supporting the manufacturing quality of the main unit and 1 year on sensor.

OPTIONAL PORTACARE® after sales package.

We have local partners to support you worldwide through our global network of Partners, Distributors and ODA (Organisational Delegated Authorities).

ODAS are Service Centres which provide regional support for caliibration in UK, France, Greece, UAE, India, Singapore and USA, Brazil, Trinidad.

Coltraco Ultrasonics

★REVIEWS.io

“The instruments acquired by Benguella Enterises (Pty) Ltd has enabled our technicians to work faster delivering accurate undisputed test results. The staff at Coltraco has been truly most supportive and professional during the years of dealing with them. We can vouch for a...”

★★★★★ Verified Reviewer

Coltraco Ultrasonics

★REVIEWS.io

“We have been working with Coltraco since 2009 and we are always happy to continue working togheter. Good customer service with prompt answer from the Coltraco's team. Right time of delivery and material always received in excellent...”

★★★★★ Verified Reviewer

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