

## sonar Ultrasonic Bolt Measurement



- Colour touch screen
- Latest technology
- Sale, Service and Rental
- Expert 24 hour support
- In stock for quick delivery
- CE marked
- Light and rugged case
- 179x179x45mm - 1.5 kg
- Colour, sunlight readable, touch display
- IP44 rated
- Real time signal tracking
- EASY and INTUITIVE to use
- Secure data collection, password protected
- Flexible and programmable data storage
- Real time echo trace stored with each reading
- Programmable pulser
- Time resolution 0.1 nS
- 0-10v high res output
- Long life rechargeable Li Ion cells
- Fast charger and USB charge options
- Fully customisable
- -20° to +70° operating temperature
- Full range of magnetic, non-magnetic and glue-on transducers
- Real time clock. Date/time stored with every reading

The **Sonar** ultrasonic time-of-flight (TOF) measurement device; measures, displays, stores and transfers bolt load and elongation data in a new, single purpose unit. The unit uses a rugged, sealed colour touch screen for easy operator use. The measurement system is a hybrid technique, using the best of both analogue and digital signal processing techniques for fast signal acquisition and precise single shot TOF measurement.

All data is logically presented on a 4.3" colour, resistive touch screen, usable with gloves. Data and digital signal traces are stored for later display and transfer. The unit has automatic temperature compensation through an included magnetic temperature probe. The novel memory system has a secure sector for all bolt data and can transfer via USB to a computer.

**Sonar** is powered by proven Li Ion batteries or through dual charger inputs: fast charge standard external 9V supply or the waterproof micro USB connector from any standard 5V USB device, battery pack or power supply.

The intuitive software has been developed specifically for the bolting industry, with input from the most experienced users and electronic developers in the bolt tightening industry.



Easy to use, and quick verification of the bolt load. Ensure your bolted joints are being tightened correctly to the design specification to avoid joint leakage, and mechanical or fatigue failure of your bolted joint assembly.

Ideal for long term monitoring of the assembly bolt load to ensure the integrity of your asset.

**Latest colour touch screen technology and intuitive easy to use operation**

Speak to TensionPro engineers for expert advice on design and assembly best practise for your bolt application.



**sonar**  **Ultrasonic Bolt Measurement**



The Sonar system kit comes complete with:

- Sonar instrument
- Fabric instrument carry case
- Rugged, lightweight tool case
- Transducer cable
- Ultrasonic Couplant
- Temperature Probe
- Fast Charger
- USB data cable

Order transducer separately to suit your specific bolt requirements

Now available for:

Rental

On-site Service

Ultrasonic bolt load measurement training courses

Part Number	Description
SONA-KIT	Sonar System Kit
SONA-1	Sonar Instrument
SONA-0188-5	3/16in 5MHz Magnetic Transducer
SONA-0125-5	1/4in 5MHz Magnetic Transducer
SONA-0375-5	3/8in 5MHz Magnetic Transducer
SONA-0500-5	1/2in 5MHz Magnetic Transducer
SONA-0750-5	3/4in 5MHz Magnetic Transducer
SONA-CB	Certified Callibration bars
SONA-USB	USB Cable
SONA-TRANS	310mm Transducer Cable
SONA-TPPR	Temperature Probe
SONA-TPAN	Temperature Antennae
SONA-CPLT	Couplant

Sonar System Kit	Sonar Instrument
	
Transducer	Callibration Bars
	
Transducer Cable	Temperature Antenna
	
Couplant	Temperature Probe
	