



## UTC 110 | Ultrasonic Module

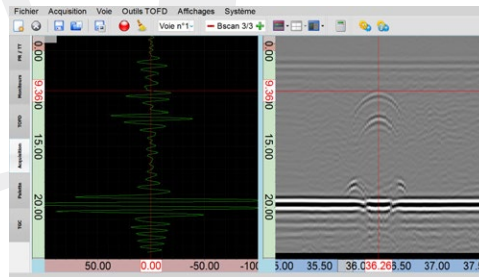
The UTC 110 module incorporates the latest developments in microelectronics for Ultrasonic Inspection. Ready to work in echo mode or transmission, this module has two input encoders and is integrated into a small IP65 box. Suitable for embedded applications requiring ultrasonic real-time acquisition, the UTC 110 is designed as a measurement tool for on-site inspections, training centers, OEM facilities and laboratories.

### INDUSTRIAL APPLICATIONS

- Flaw detection & thickness measurement
- Tube and pipe inspection
- Flaw inspection and TOFD
- Monitoring
- Composite and metal materials
- Rope access
- OEM applications

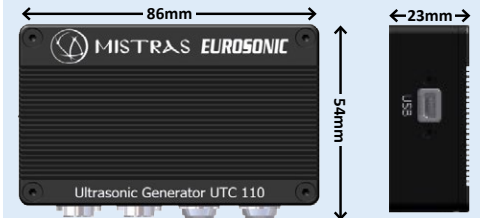
### LABORATORY APPLICATIONS

- Young's modulus
- Signals record and exportation
- Research and development
- Training
- Real time Fourier transform
- Real time wavelet decomposition filtering
- Algorithmic development



### FEATURES

- Integrated UT system
- A, B or C scan view
- 2 encoder inputs (up to 4, optional)
- Interfaces with X - Y or R -  $\theta$  scanner
- USB Powered
- Compact size and low weight
- Synchronization of multiple modules
- Euroscan V & UTwin™ software
- Compatible with Windows and Android
- DLL available (Labview, Matlab, etc.)
- Software Development optional
- Starter Pack, TOFD Pack, Pro Pack available



### SPECIFICATIONS

|  |                                |
|--|--------------------------------|
| Pulser: Type .....   | Square                         |
| Pulser: Voltage.....   | 30 to 280 V                    |
| Pulser: Width of square.....                                   | 20 to 400 ns                   |
| Pulser: Resolution of width .....                              | 5 ns                           |
| Pulser: Fall time .....  | 4.8 ns                         |
| Pulser: Rise time .....  | 5.2 ns                         |
| Pulser: PRF.....   | 10 kHz max                     |
| Receiver: Amplification.....                                   | 0 to 88 dB                     |
| Receiver: Averaging .....                                      | 2, 4, 8, 16                    |
| Receiver: Noise.....   | 21 nV/ Hz                      |
| Receiver: Linearity of TGC .....                               | 40 dB/us                       |
| Receiver: Resolution of TGC .....                              | 10 ns                          |
| Receiver: Number of TGC points .....                           | 256                            |
| Receiver: Bandwidth to @ -3dB .....                            | 22 MHz                         |
| Digitization: Resolution .....                                 | 12 bits                        |
| Digitization: Frequency... 25, 50, 100 MHz, 200 MHz (optional) |                                |
| Filter: Type.....  | Digital FIR                    |
| Filter: Coefficients.....                                      | 32 for, 2.5 MHz, 5 MHz, 10 MHz |
| Memory: Type .....   | SRAM                           |
| Memory: Capacity .....   | 2 MB                           |
| Memory: Resolution .....                                       | 16 bits                        |
| Encoders: Number .....   | 2 or 4                         |
| Communication/Power Supply.....                                | USB                            |
| Power consumption .....  | 2.8 W                          |
| Weight.....  | 150 g                          |

**WORLDWIDE HEADQUARTERS:**  
195 Clarksville Rd •  
Princeton Jct, NJ 08550 • USA  
T: +1.609.716.4000 • F: +1.609.716.0706  
E-MAIL: sales@mistrasgroup.com

Visit our website for an office near you  
[www.mistrasgroup.com](http://www.mistrasgroup.com)

Local Presence,  
Global Reach!