

# Digital Ultrasonic Thickness Gauges

*for measuring steel and other metal, glass, ceramic and synthetic wall thicknesses*



**UTG Beta**  
**UTG Alpha**

SaluTron<sup>®</sup>

# Maximum performance in pocket-size format.

## UTG Alpha®

The UTG **Alpha**® is a highly accurate non-destructive ultrasonic thickness gauge for steel, cast iron, aluminium, glass, ceramics and plastics. The measuring range with the standard sensor N05 is 1.2 to 230 mm in steel. For various applications specific probes with different frequencies and diameters are available, which can be ordered on request. All probes are automatically identified after connection.

## UTG Beta®

The UTG **Beta**® is a highly accurate non-destructive ultrasonic thickness gauge for steel only. The measuring range for this gauge is 1.2 to 200 mm. It works with the automatic sound velocity determination of the material. The measuring range for this gauge is 1.2 to 200 mm. The high degree of craftsmanship comes along with a user-friendly ease of operation.

### Features:

- Memory up to 1980 measurements
- Switch between mm and inch
- Firm and robust aluminium body
- Probe-Zero function
- Two-Point Calibration function
- Single-Point and Scan Mode
- Coupling status indicator
- Battery capacity information
- Operating time: 100 hours (backlight off)
- Possibility for PC-transfer

### Features:

- High accuracy of measurement even for small sample pieces
- Light-weight for portability
- Large back-lit LCD display
- Battery capacity indication
- Average battery operating time of 250 hours (without backlight) and 30 hours (with backlight)
- Hard-wearing sensor head
- Sensors with plug-ins for ease of exchange and 1.6 m long cable

Technical Specifications	UTG Alpha®	UTG Beta®
Measuring technique	Measurement of first echo: transmit-receive sensor	Measurement of first echo: transmit-receive sensor
Display	128x64 Dot-Matrix LCD with backlight	4-digit LCD 10 mm high metric
Measuring range	1.2-230 mm in steel, others depending on test material and chosen sensor	1.2 - 200 mm in steel
Measuring accuracy	adjustable ± (0.5% thickness ± 0.04) mm	adjustable ± 0.1 mm
Resolution	0.01 mm, 0.1 mm or 0.001 inch (selectable)	0.1 mm
Sound velocity range	1000 to 9999 m/sec.	5900 m/sec.
Measurement speed	4 times/sec. 10 times/sec. in scan mode	2 times/sec.
Memory	1980 measurements (20 files for 99 values each), automatically or manually	none
Auto Power Off	after 3 minutes	after 2 minutes
Coupling indicator	as display symbol	as display symbol
Power supply	2 x 1.5 V alkaline (AA size)	1 x 1.5 V alkaline (AAA size)
Battery capacity indication	as display symbol	as display symbol
Couplant	dispenser with 100 cm <sup>3</sup>	tube with 100 cm <sup>3</sup>
Operating temperature range	-20°C to +60°C	-10°C to +40°C
Dimension (L x W x H)	132 x 76.2 x 30 mm	107 x 60 x 15 mm
Weight	345 g	100 g
Delivery range	standard sensor N05, instrument case, couplant, batteries, screwdriver, manual	standard sensor PT-5, instrument case, couplant, batteries, manual
Optional accessory	other sensors, RS232 cable, software	

### Sensors for UTG Alpha®

#### Standard Sensor N05 and N05/90°

Suitable for steel, non-ferrous metals, aluminium with its alloys, synthetics, ceramics, glass.

Range:	1.2 – 230 mm in steel
Surface temperature:	-10°C to +50°C
Frequency:	5 MHz
Contact surface diameter (Ø):	10 mm
Connector:	direct, (N05/90°: right angled)

#### High Temperature Sensor HT5

Suitable for steel, non-ferrous metals, aluminium with its alloys, synthetics, ceramics, glass.

Range:	3 - 200 mm in steel
Surface temperature:	-10°C to +300°C
Frequency:	5 MHz
Contact surface diameter (Ø):	14 mm
Connector:	direct

#### Special Miniature Sensor N07

For measurements on small pipes, curved material, edges, small contact areas and where the area of accessibility is limited.

Range:	0.75 - 80 mm in steel
Surface temperature:	-10°C to +50°C
Frequency:	7 MHz
Contact surface diameter (Ø):	6 mm
Connector:	right-angled

#### Cast Iron Sensor N02

For measurements on material with high signal attenuation such as cast-iron and synthetics.

Range:	3 - 300 mm in steel
Surface temperature:	-10°C to +50°C
Frequency:	2.5 MHz
Contact surface diameter (Ø):	14 mm
Connector:	direct

Technical details are subject to change.



Production and distribution  
of measuring instruments



研士強國際集團 YENSTRON GROUP

益瀚國際科技股份有限公司

台中總公司: 407227 台中市西屯區工業區一路2巷7號1F

TEL: (04) 2359-3199 FAX: (04) 2359-8507

<http://www.yenstron.com.tw>

Certified  
EN ISO 9001