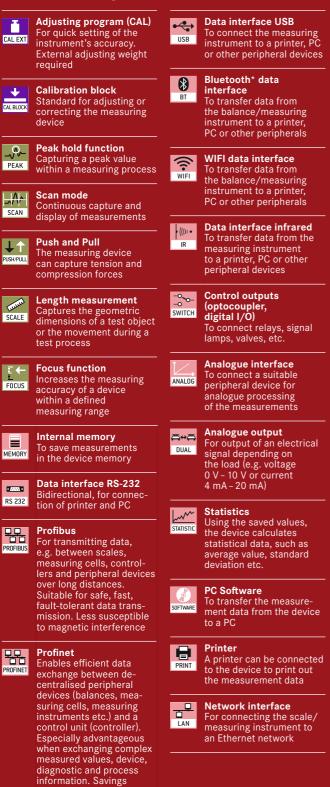


MATERIAL THICKNESS MEASUREMENT

Industry | Laboratory | Quality Assurance



SAUTER Pictograms





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potential through shorter commissioning times and device integration possible

SAUTER Models A-Z

SAUTER Models A-Z		
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Y		0.2

SAUTER Customer Consultants

With questions about our products and services, we will be happy to advise you:

Product Specialist Measuring Technology



Irmgard Russo Tel. +49 7433 9933-208 info.sauter@kern-sohn.com

Product Specialist Measuring Technology

Helga Biselli Tel. +49 7433 9933-188 info.sauter@kern-sohn.com

Product Specialist Measuring Technology



Andreas Vossler Tel. +49 7433 9933-243 info.sauter@kern-sohn.com

UK, BE, IRE, IS, LUX, NL



Maren Neff Tel. +49 7433 9933-132 Mobil +49 151 46143240 maren.neff@kern-sohn.com

PL, LV, LT, EE, SK, CZ, HU



Mark Hauder Tel. +49 7433 9933-310 Mobil +49 160 3378426 mark.hauder@kern-sohn.com

SL, HR, AL, MK, BG, BA, ME, RO, GR, CY, GUS



Ariana Sevcenco Tel. +49 7433 9933-203 Mobil +49 151 72434692 ariana.sevcenco@kern-sohn.com

North America, Africa, Asia, Middle East, Oceania, TR



Corinna Matthes Tel. +49 7433 9933-215 Mobil +49 151 44568364 corinna.matthes@kern-sohn.com

Category Manager Industrial Measuring Technology



Michael Stingel Tel. +49 7433 9933-293 michael.stingel@kern-sohn.com

Sales & Marketing Manager



Stephan Ade Tel. +49 7433 9933-121 Mobil +49 171 3060086 <u>ade@kern-sohn.com</u>

SAUTER Hotlines

Technica You will

Service I for general

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find assistance here quickly: +49 7433 9933	
Hotline I technical questions about your SAUTER product	

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for all technical questions concerning our SAUTER measuring instruments,	
test benches, force measuring accessories (clamps etc.), SAUTER software	

Industrial Scales

for all technical questions concerning our basic scales (laboratory & industry), pocket balances, school balances, bench scales, price-computing scales, platform scales, counting scales, counting systems, floor scales, pallet truck scales, crane scales, veterinary scales

System Solutions Industry 4.0

for all technical questions concerning the interlocking of the latest information and communication technology with our scales, load cells and measuring devices as well as questions about KERN software **→200**

→333



Reliable material thickness gauge for daily use

Features

- External measuring head for difficult-to-access measuring points
- Selectable measuring units: mm, inch
- Auto-Power-Off
- Base plate for adjustment included
- Scope of delivery: Operating instructions, batteries, external measuring head (Ø 8 mm) and ultrasound contact gel
- Delivered in a robust carrying case
- TB 200-0.1US-RED: Can only analyse these materials: cast iron, aluminium, copper, brass, zinc, quartz glass, polyehylene, PVC, grey cast iron, nodular cast iron, steel

Technical data

- Measuring precision: 0,5 % of [Max]
- Overall dimensions W×D×H 161×69×32 mm
- Battery operation, batteries standard (4×1.5 V AA)
- Net weight approx. 0,30 kg

- External measuring head, 5 MHz, Ø 6 mm, for thin test materials: measuring range (steel) up to approx. 80 mm, SAUTER ATB-US01, € 215,-
- External measuring head, 5 MHz, Ø 12 mm, for hot test materials: Measuring range (steel)
 3-200 mm at temperatures of up to 300 °C, SAUTER ATB-US02, € 270,-
- External measuring head, 5 MHz, Ø 8 mm, SAUTER ATB-US06, € 110,-
- External measuring head, 5 MHz, Ø 10 mm, SAUTER ATU-US09, € **150,**-
- Ultrasound contact gel, refill pack, approx.
 70 ml, SAUTER ATB-US03, € 35,-

STANDARD				OPTION
+	→0←			ISO
CAL BLOCK	ZERO	BATT	1 DAY	+4 DAYS

Model	Measuring range	Readout	Sensor	Sound velocity	Price	Optior	ı
					excl. of VAT	Factory Calibratio	n Certificate
		[d]			ex works		
SAUTER	mm	mm		m/sec	€	KERN	€
TB 200-0.1US	1,5 - 200	0,1	5 MHz Ø 8 mm	500 - 9999	405,-	961-113	167,-
TB 200-0.1US-RED	1,5 - 200	0,1	5 MHz Ø 8 mm	500 - 9999	345,-	961-113	167,-





Compact pocket-sized material thickness gauge

Features

- External measuring head for difficult-to-access measuring points
- Selectable measuring units: mm, inch
- · Data interface RS-232, included
- AUTO-OFF function to preserve the battery
- Base plate for adjustment included
- Scope of delivery: Operating instructions, batteries, external measuring head (Ø 8 mm) and ultrasound contact gel
- 1 Delivered in a robust carrying case

Technical data

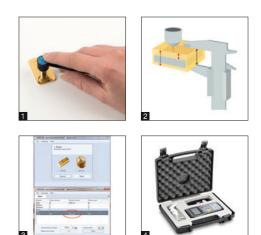
- Measuring precision: 0,5 % of [Max] + 0,1 mm
- Overall dimensions W×D×H 30×65×120 mm
- Battery operation, batteries standard (4×1.5 V AAA)
- Net weight approx. 0,20 kg

- Data transfer software, interface cable included, SAUTER ATC-01, € 100,-
- External measuring head, 5 MHz, Ø 6 mm, for thin test materials: measuring range (steel) up to approx. 80 mm, SAUTER ATB-US01, € 215,-
- External measuring head, 5 MHz, Ø 12 mm, for hot test materials: Measuring range (steel)
 3-200 mm at temperatures of up to 300 °C, SAUTER ATB-US02, € 270,-
- External measuring head, 5 MHz, Ø 8 mm, SAUTER ATB-US06, € 110,-
- External measuring head, 5 MHz, Ø 10 mm, SAUTER ATU-US09, € **150,**-
- External measuring head, 5 MHz, \varnothing 10 mm, transducer at an angle of 90°,
- SAUTER ATU-US10, **€ 150,-**
- Ultrasound contact gel, refill pack, approx.
 70 ml, SAUTER ATB-US03, € 35,-



Model	Measuring range	Readout	Sensor	Sound velocity	Price excl. of VAT	Optior	
SAUTER	mm	[d] mm		m/sec	ex works €	Factory Calibratio	€
TD 225-0.1US	1,2 - 225	0,1	5 MHz Ø 8 mm	1000 - 9999	485,-	961-113	167,-





Ultrasonic measuring instrument for checking the authenticity of gold bars and coins

Features

- You can use the TN-GOLD to determine whether gold or silver bars and coins are genuine or whether they contain a core of a different material
- The instrument measures the thickness of gold bars and gold coins using ultrasound
- Selectable measuring units: mm, inch
- Process: Ultrasound waves are directed onto the test object using a sensor. The waves penetrate the test object, are then reflected from a surface opposite the object and then picked up again by the sensor. The measurement determined by this process will be compared with the material thickness as measured by a traditional calliper gauge. On the basis of the measurement given, false cores (Figure: grey) for example, those made of tungsten, lead, etc. can be easily identified, as the ultrasound reacts differently, compared with pure gold
- SAUTER SSG software (included) can be used to calculate the sound velocity for various precious metal alloys. This makes it possible to determine whether coins or ingots contain false cores or whether they consist of one and the same material. Compatible with the following operating systems: Windows® 7/8/10
- Known additions in tested gold items e.g. copper or silver – are compensated by the software
- In addition, the software determines the value of the gold item
- It is a test process which measures right through the whole bar or the whole coin without interference and thereby guarantees the highest level of certainty
- Internal memory for up to 20 files (with up to 100 values per file)
- Base plate for adjustment included
- Scope of delivery: Operating instructions, batteries, external measuring head (Ø 6 mm) and ultrasound contact gel
- Delivered in a robust carrying case

Technical data

- Measuring precision: 0,5 % of [Max] ± 0,04 mm
- Overall dimensions W×D×H 150×74×32 mm
 Battery operation, batteries standard (2×1.5 V AA), AUTO-OFF function to preserve the battery
- Net weight approx. 0,25 kg

- Data transfer software, interface cable included, SAUTER ATU-04, € 120,-
- USB/PC connection cable (USB-A/USB mini), SAUTER FL-A01, € 50,-
- External measuring head, 7 MHz, Ø 6 mm, for thin test materials: Measuring range 0,75-80 mm (steel),
 SAUTER ATU-US02, € 150,-
- Ultrasound contact gel, refill pack, approx.
 70 ml, SAUTER ATB-US03, € 35,-

STANDARD	OPTION					
	USB	→ O ← ZERO	BATT	1 DAY	SOFTWARE	ISO +4 DAYS

Model	Measuring range	Readout	Sensor	Sound velocity	Price	Option	1
		[d]			excl. of VAT ex works	Factory Calibratio	on Certificate
SAUTER	mm	mm		m/sec	€	KERN	€
TN GOLD 80	0.75 - 80	0.01	7 MHz I Ø 6 mm	1000 - 9999	770	961-113	167





5

Portable measuring device for ultrasonic material thickness testing

Features

- External measuring head
- Data interface USB standard (only for models with readout [d] = 0,01 mm)
- Scan mode (10 measurements per sec.) or single point measuring mode possible
- Internal memory for up to 20 files (with up to 100 values per file)
- Selectable measuring units: mm, inch
- Scope of delivery: Operating instructions, batteries, device-specific measuring head and ultrasound contact gel
- Delivered in a robust carrying case

Technical data

- Measuring precision: 0,5 % of [Max] \pm 0,04 mm
- + Overall dimensions W×D×H 150×74×32 mm
- Battery operation, batteries standard (2×1.5 V AA), AUTO-OFF function to preserve the battery
- Net weight approx. 0,25 kg

Accessories

- Data transfer software, interface cable included, SAUTER ATU-04, € 120,-
- External measuring head, 2,5 MHz, Ø 14 mm, for thick samples, in particular cast iron with rough upper surfaces: Measuring range 3–300 mm (steel), SAUTER ATU-US01, € 235,–
- External measuring head, 7 MHz, Ø 6 mm, for thin test materials: Measuring range 0,75-80 mm (steel),
- SAUTER ATU-US02, € **150,-**
- External measuring head, 5 MHz, Ø 10 mm, SAUTER ATU-US09, € 150,-
- External measuring head, 5 MHz, Ø 10 mm, transducer at an angle of 90°, SAUTER ATU-US10, € 150,-
- External measuring head, 5 MHz, Ø 12 mm, for hot test materials: Measuring range (steel)
 3-200 mm at temperatures of up to 300 °C, SAUTER ATB-US02, € 270,-
- Ultrasound contact gel, refill pack, approx.
 70 ml, SAUTER ATB-US03, € 35,-

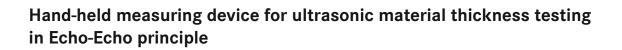
STANDARD)					OPTION	
CAL BLOCK	MEMORY	USB	→ 0 ← ZER0	BATT	1 DAY	SOFTWARE	ISO
		[d]=0,01 mm					

Model	Measuring range	Readout	Sensor	Sound velocity	Price	Option	ı
SAUTER	mm	[d] mm		m/sec	excl. of VAT ex works €	Factory Calibratio	n Certificate €
TN 80-0.1US	0,75 - 80	0,1	7 MHz Ø 6 mm	1000 - 9999	630,-	961-113	167,-
TN 230-0.1US	1,2 - 230	0,1	5 MHz Ø 10 mm	1000 - 9999	630,-	961-113	167,-
TN 300-0.1US*	3 - 300	0,1	2,5 MHz Ø 14 mm	1000 - 9999	740,-	961-113	167,-
TN 80-0.01US	0,75 - 80	0,01	7 MHz Ø 6 mm	1000 - 9999	700,-	961-113	167,-
TN 230-0.01US	1,2 - 230	0,01	5 MHz Ø 10 mm	1000 - 9999	700,-	961-113	167,-
TN 300-0.01US	3 - 300	0,01	2,5 MHz Ø 14 mm	1000 - 9999	800,-	961-113	167,-

* ONLY WHILE STOCKS LAST







Features

- External measuring head
- USB data interface, as standard
- Scan mode (10 measurements per sec.) or single point measuring mode possible
- Internal memory for up to 20 files (with up to 100 values per file)
- Selectable measuring units: mm, inch
- Two measuring modes to determine material thickness:
- Pulse-Echo mode
- Echo-Echo mode
- Echo-Echo measuring: Determining the actual thickness of materials irrespective of any coating which might be present. In this way, the wall thickness of pipes, for example, can be determined in a non-destructive manner, without having to remove the coating and the measurement can be shown on the display, with the adjustment for the coating thickness already taken into account

- Echo-Echo measurements are only possible with the measuring head included as part of the delivery (SAUTER ATU-US12, see accessories)
- Scope of delivery: Operating instructions, batteries, external measuring head (Ø 10 mm) and ultrasound contact gel
- Delivered in a robust carrying case

Technical data

- Measuring precision: 0,5 % of [Max] \pm 0,04 mm
- + Overall dimensions W×D×H 150×74×32 mm
- Battery operation, batteries standard (2×1.5 V AA), AUTO-OFF function to preserve the battery
- Net weight approx. 0,25 kg

Accessories

- Data transfer software, interface cable included, SAUTER ATU-04, € 120,-
- External measuring head, 5 MHz, Ø 10 mm, for echo-echo measuring, SAUTER ATU-US12, € 345,-
- Ultrasound contact gel, refill pack, approx.
 70 ml, SAUTER ATB-US03, € 35,-

Note: All following Pulse-Echo sensors can only be used in Pulse-Echo mode, not in Echo-Echo mode

- External measuring head, 2,5 MHz, Ø 14 mm, for thick samples, in particular cast iron with rough upper surfaces: Measuring range 3-300 mm (steel), SAUTER ATU-US01, € 235,-
- External measuring head, 7 MHz, Ø 6 mm, for thin test materials: Measuring range 0,75-80 mm (steel),
- SAUTER ATU-US02, **€ 150,-**
- External measuring head, 5 MHz, Ø 10 mm, SAUTER ATU-US09, € 150,-
- External measuring head, 5 MHz, Ø 10 mm, transducer at an angle of 90°, SAUTER ATU-US10, € 150,-



Model	Measuring range	Measuring range	Readout	Measuring head	Sound velocity	Price	Optior	ı
	Echo-Echo	Pulse-Echo				excl. of VAT	Factory Calibratio	n Certificate
			[d]			ex works		
SAUTER	mm	mm	mm		m/sec	€	KERN	€
TN 30-0.01EE	3 - 30	0,65 - 600	0,01	5 MHz Ø 10 mm	1000 - 9999	980,-	961-113	167,-
TN 60-0.01EE	3 - 60	0,7 - 600	0,01	5 MHz Ø 10 mm	1000 - 9999	1340,-	961-113	167,-







Premium ultrasonic thickness gauge

Features

- External measuring head for difficult-to-access measuring points
- 1 USB data interface, as standard
- Scan mode (10 measurements per sec.) or single point measuring mode possible
- Internal memory for up to 20 files (with up to 100 values per file)
- Measuring with tolerance range (limit-setting function): Upper and lower limiting can be programmed individually. The process is supported by an audible and visual signal
- Selectable measuring units: mm, inch
- Robust metal housing
- Base plate for adjustment included
- Scope of delivery: Operating instructions, batteries, device-specific measuring head and ultrasound contact gel
- 2 Delivered in a robust carrying case

Technical data

- Measuring precision: 0,5 % of [Max] \pm 0,04 mm
- + Overall dimensions W×D×H 130×76×32 mm
- Battery operation, batteries standard (2×1.5 V AA)
- Net weight approx. 0,50 kg

Accessories

- Software, interface cable included, SAUTER ATU-04TU, € 120,-
- External measuring head, 2,5 MHz, Ø 14 mm, for thick samples, in particular cast iron with rough upper surfaces: Measuring range 3–300 mm (steel), SAUTER ATU-US01, € 235,–
- External measuring head, 7 MHz, Ø 6 mm, for thin test materials: Measuring range 0,75-80 mm (steel),
- SAUTER ATU-US02, € **150,-**
- External measuring head, 5 MHz, Ø 12 mm, for hot test materials: Measuring range (steel)
 3-200 mm at temperatures of up to 300 °C, SAUTER ATB-US02, € 270,-
- External measuring head, 5 MHz, Ø 10 mm, SAUTER ATU-US09, € 150,-
- External measuring head, 5 MHz, Ø 10 mm, transducer at an angle of 90°,
- SAUTER ATU-US10, € 150,-• Ultrasound contact gel, refill pack, approx.
- 70 ml, SAUTER ATB-US03, € 35,-

STANDARD						OPTION
CAL BLOCK	USB	-√+ ⊙ 🤊 TOL	→ O ← ZERO	BATT	1 DAY	SOFTWARE +4 DAYS

Model	Measuring range	Readout	Measuring head	Sound velocity	Price	Option Factory Calibration Certificate	
		[d]			excl. of VAT ex works		
SAUTER	mm	mm		m/sec	€	KERN	€
TU 80-0.01US	0,75 - 80	0,01	7 MHz Ø 6 mm	1000 - 9999	1310,-	961-113	167,-
TU 230-0.01US	1,2 - 230	0,01	5 MHz Ø 10 mm	1000 - 9999	1310,-	961-113	167,-
TU 300-0.01US	3 - 300	0,01	2,5 MHz Ø 14 mm	1000 - 9999	1410,-	961-113	167,-

ONLY WHILE STOCKS LAST









Material thickness gauge for ultrasonic material thickness testing in Echo-Echo principle

Features

STANDARD

SCAN

- Dual measuring modes to determine material thickness:
- Pulse-Echo mode (up to 600 mm)
- Echo-Echo mode (up to 100 mm) Echo-Echo measurement: Determines the actual material thickness regardless of whether there is a coating on the base metal. In this way, the wall thickness of pipes, for example, can be determined without having to remove the coating. The measurement will be output, with the adjustment for the coating thickness taken into account
- Can be used on these materials, as well as others: Metals, plastics, ceramics, composite materials, epoxy, glass and other materials
- High-precision mode: Readout accuracy can be switched from 0.1 mm to 0.01 mm
- Premium display: TFT colour display (320×240) with adjustable brightness, so that it can be read under the most varied lighting conditions
- Large internal data memory for up to 100 data sets each with 100 individual values
- Energy-saving operation with 2× AA batteries and an operating time of at least 30 hours, adjustable power-off time (sleep mode) and adjustable display switch-off (standby mode)

USB

+0∢

ZERO

BATT

1 DAY

TOL

- 2 USB data output for easy data download from the device memory to the PC, as standard
- Triple-calibration mode: Automatic 0-point adjustment, 1-point adjustment at a specified material thickness, 2-point precision adjustment with two specified material thicknesses
- 3 different measurement modes: standard measuring (single measurement), scan mode (for continuous measurement and display of the ACTUAL value, the MIN and MAX value of the measuring sequence) and DIFF mode with calculation of the difference between the ACTUAL measured value and a manually defined nominal thickness
- Limit alarm function: Upper and lower limit adjustable. The measurement process is supported by an audible and visual signal
- Menu languages: DE, EN, FR, ES, IT

OPTION

- Date and time can be adjusted. It is possible to store the measurement values with a time stamp
- Standard measuring probe SAUTER ATU-US12
 included with delivery
- Scope of delivery: Operating instructions, batteries, external measuring head (Ø 10 mm) and ultrasound contact gel

- I Delivered in a robust carrying case
 Interface cable SAUTER FL-A01
- (for use of the software) included

Technical data

- Measuring precision: 0,4 % of [Max] \pm 0,04 mm
- Overall dimensions W×D×H 31×69×130 mm
 Battery operation, batteries standard (2×1.5 V AA), AUTO-OFF function to preserve the battery
- Net weight approx. 0,25 kg

- External measuring head, 5 MHz, Ø 10 mm, for echo-echo measuring,
- SAUTER ATU-US12, **€ 345,-**
- Ultrasound contact gel, refill pack, approx.
 70 ml, SAUTER ATB-US03, € 35,-
- BalanceConnection software for flexible measured value recording or transmission, compatible with Microsoft® Excel, Access and other applications, scope of delivery: 1 CD, 1 license, KERN SCD-4.0, € 210,-
- Other sensors on request
- Further details and plenty of further accessories see *internet*

Model	Measuring range Echo-Echo	Measuring range Pulse-Echo	Readout	Sensor	Sound velocity	Price excl. of VAT	Option Factory Calibration	
SAUTER	mm	mm	[d] mm		m/sec	ex works €	KERN	€
TO 100-0.01EE	3 - 100	0,7 - 600	0,01	5 MHz Ø 10 mm	200 - 19999	1490,-	961-113	167,-

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