U-GAGE® T30UX

High-performance ultrasonic sensors for demanding applications



Enhanced ultrasonic capabilities in proven U-GAGE® T30U housing.

The U-GAGE® T30UX Sensor delivers all the advantages of conventional ultrasonic sensors, using sound waves to measure distance and detect the presence of targets. With its extended range and advanced temperature compensation, the T30UX ultrasonic sensor solves more challenging applications than ever before.

- ► Features T-style right-angle sensor package with popular 30 mm threaded mount
- ▶ Delivers high-accuracy performance with built-in temperature compensation across a wide range of ambient temperatures
- ► Offers choice of three ranges for reliable sensing from 100 mm to 3 m
- ► Includes models available with a single analog or user-configurable discrete output
- ► Uses push-button TEACH-mode programming for simple sensor setup; offers remote TEACH for increased security and convenience
- ► Presents sensor operating status using highly visible indicator LEDs
- ► Resists harsh environments with rugged IP67 (NEMA 6) housing and fully encapsulated electronics

Superior ultrasonic sensors that withstand hostile environments

Solves your toughest application challenges

- ► Liquid level monitoring in tanks
- ► Web loop control
- ► Slurry monitoring in vats
- ► Clear bottle detection
- ► Automotive glass detection
- ► Repeatable detection of targets of various colors

Simple setup and advanced features for accurate sensing

- ► Robust housing with 30 mm threaded barrel and a wide variety of mounting brackets
- ▶ 10 to 30V dc operation with a choice of outputs
 - Analog models with 4 to 20 mA or 0 to 10V dc output by model
 - Configurable discrete model allows users to select normally open (NO) or normally closed (NC) output and NPN or PNP output type
- ► Wide operating temperature range from -40° to 70° C
- ▶ Bright LED status indicators for Power, Signal Strength and Output
- ▶ 2 m or 9 m attached cable, or 4-pin Euro-style quick-disconnect
- ► 4-pin I/O for junction block compatibility

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1.888.373.6767











U-GAGE® T30UX Models, 10 to 30V dc

Models†	Range and Frequency	Cable*	Output	Response Time	Data Sheet
T30UXDA	100 mm - 1 m 224 kHz	2 m Sele	Discrete Selectable NPN or PNP,	45 ms	138381
T30UXDB	200 mm - 2 m 174 kHz			92 ms	
T30UXDC	300 mm - 3 m 114 kHz		NO or NC	135 ms	
T30UXUA	100 mm - 1 m	2 m	Analog 0 to 10V dc	Selectable	141958
T30UXIA	224 kHz		Analog 4 to 20 mA	45 or 105 ms	
T30UXUB	200 mm - 2 m		Analog 0 to 10V dc	Selectable	
T30UXIB	174 kHz		Analog 4 to 20 mA	92 or 222 ms	
T30UXUC	300 mm - 3 m		Analog 0 to 10V dc	Selectable	
T30UXIC	114 kHz		Analog 4 to 20 mA	135 or 318 ms	

^{*}Only standard 2 m cable models are listed. For 9 m cable, add suffix **W/30** to the model number (example, **T30UXDAW/30**). **QD Models:** For a 4-pin Euro-style integral QD, add suffix **Q8** to the model number (example, **T30UXDAQ8**). For a 4-pin 150 mm Euro-style PUR pigtail QD, add suffix **QPMA** to the model number (example, **T30UXDAQPMA**). A model with a QD connector requires a mating cordset.

Quick-Disconnect (QD) Cordsets

Style	Model	Length	Dimensions	Female Pinout
4-pin Euro-style, straight with shield	MQDEC2-406 MQDEC2-415 MQDEC2-430	2 m 5 m 9 m	44 mm M12 x 1	1 = Brown 2 = White 3 = Blue
4-pin Euro-style, right-angle with shield	MQDEC2-406RA MQDEC2-415RA MQDEC2-430RA	2 m 5 m 9 m	38 mm max. M12 x 1 Ø 15 mm	4 = Black

Brackets

Models Description Swivel bracket with set screws for mounting sensor by the cable hub · Black reinforced thermoplastic polyester · Stainless steel swivel locking hardware and hex wrench included **SMB1815SF** • Right-angle mounting bracket with curved slot for versatile orientation • Clearance for M6 (1/4") hardware · 12-ga. stainless steel SMB30A • Swivel bracket with tilt and pan movement for precision adjustment Mounting hole for 30 mm sensor • 12-ga. 304 stainless steel SMB30FA · Swivel bracket with 30 mm mounting hole for sensor · Black reinforced thermoplastic polyester · Stainless steel mounting and swivel locking hardware included SMB30SC

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Dimensions



Online Learning

Online Training & Tutorials

A complete resource for tutorials, product questions and answers— and the mechanics and theory behind sensor technology available online at www.bannerengineering.com

- Q: How does an ultrasonic sensor work?
- O: When would I use an ultrasonic?
- Q: How do ultrasonic sensors deal with noise and interference?
- Q: What environmental conditions affect an ultrasonic sensor?
- Q: What is a dead zone?
- Q: What types of targets should I avoid when using an ultrasonic sensor?

Go online for answers to these questions or to pose your own!

Models to solve your toughest sensing challenges



A complete offering of housing styles, mounting options and sensing ranges means there is a Banner ultrasonic solution for the most difficult applications in your plant.



[†] Contact factory to request chemically resistant flange or fill-level control models.