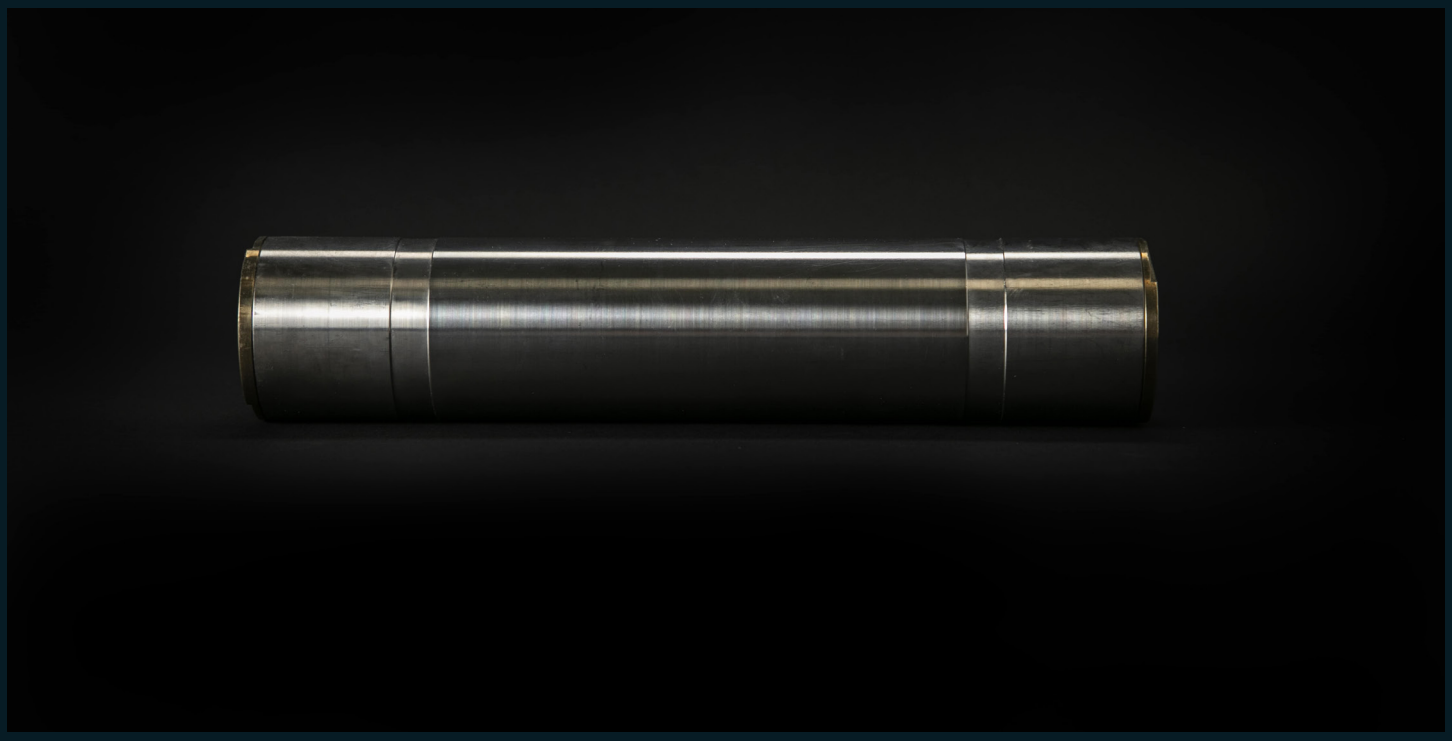
PRODUCT

EMTx40 EM Transmitter



The EMTx40 transmitter is an ATEX certified electromagnetic (EM) transmitter that can be used for pig tracking and locating functions, intended for use in pipeline diameters of 10" and above. The transmitters operate effectively in every type of pipeline, i.e. top-side, buried, gas or liquid and in pipeline bundles where acoustic transmitters are either less effective or ineffective.

Key Benefits

- Exact location of the transmitter can be determined to within a few cm by detecting the inherent EM null spot of the transmitter.
- Self-regulation ensures the signal strength is constant over the battery's lifetime.
- Several activation methods designed to conserve battery life when deployed in advance of pigging operations.
- Bluetooth connection and IK Trax's EMTx CONFIG Application allows transmitter parameters such as pulse rate, pulse width and power output to be modified by the user providing flexibility to manage signal strength and battery requirements.
- Mounting holes are built in to aid centralising the transmitter within a pig body, eliminating the need for a transmitter carrier. This dramatically increases the received EM signal.

Interested in hearing more about this, or other applications? Contact our IK Trax specialists at:

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The standard transmission frequency is 22Hz however the frequency is configurable between 10Hz and 30Hz. Once the approximate location of the transmitter has been established using an EM Receiver with the antenna held parallel to the pipeline/transmitter, the exact location can be determined to within a few cm by orientating the antenna perpindicular to the pipe and detecting the inherent EM null spot of the transmitter.

The EMTx40 series offers several activation methods designed to conserve battery life when deployed in advance of pigging operations including bleedscrew, pressure switch and delayed activation. These methods may be used individually or in combination. Contact IK Trax to discuss your individual requirements.

The received signal strength is dependent on several factors and frequency, signal strength and transmission pattern can be configured to achieve the desired balance between detectability and battery life.

PRODUCT SPECIFICATION

Battery Type (Alkaline)	5x Duracell Industrial ID1300 Alkaline Cells
Battery Type (Lithium)	5x SAFT LS33600 Lithium D Cells
Battery Life at +5°C in air (at 100% power)	Up to 85 days dependent on battery type and pulse rate
Frequency Range	10Hz to 30Hz
Temperature Range (Alkaline)	-20°C to + 54°C (-4°F to + 129.2°F)
Temperature Range (Lithium)	-40°C to + 80°C (-40°F to + 176°F)
External Pressure Rating	500bar (7252Psi)
Standard Signal at 1m	650mVpp (with IK Trax reference antenna in air)

MATERIALS & DIMENSIONS

Housing Material	ASTM B348 Grade 5 Titanium Ti-6Al-4V
Endcap Material	Alloy Bronze CA 104 EN 12163
O-Ring Material	NBR70
Length	374mm (14.7”)
Diameter	76.8mm (3.02”)
Transmitter Weight (including batteries)	7kg (15.5lbs)

CERTIFICATION

ATEX/IECEx/UKEx Code	Ex II 2 G Ex db IIB+H2 T6...T5 Gb
EU Type Examination Number	ERO 23 ATEX 0011X
IECEx Cert No	IECEx EMT 23.0008X
UKEx Cert No	EMA 23 UKEX 0026X

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