

# Biodegradable UHF RFID tag

## What is a Biodegradable UHF RFID tag (Biotag)

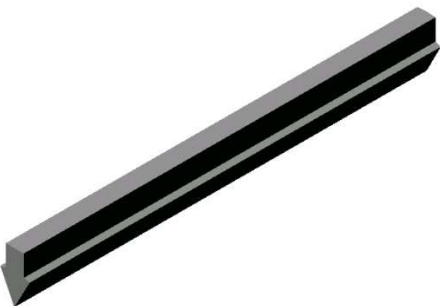
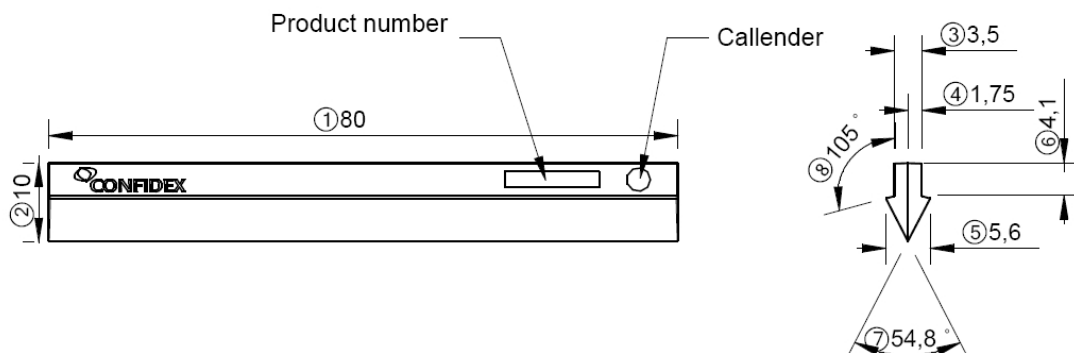
The UHF RFID transponder has been developed during the IK project. Encapsulated RFID tag has up to 240-bit EPC memory with 512 bits of user configurable memory and read distances up to 2-3 meters.

The product has been designed to be compatible with industrial processes in the sawing and pulping applications. It is optimized to European region. (For other regions please contact Confidex).

### ➤ Dimensions

Main Dimensions	Length (mm)	Height (mm)	Thickness (mm)
	80	10	5,7

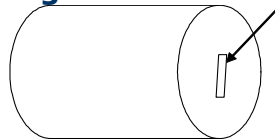
Frequency range	865-869 MHz
Air interface protocol	Gen2 (ISO 18000-6C)
Memory	240-bit EPC+512-bit user memory
Anti-Collision Protocol	EPC Class 1 Generation 2
Tag material	ARBOFORM LV32 natural





## > Application information

The IK tag has been designed to be inserted to fresh wood materials\*. The tag should be installed soon after the log is cut, and as close to the center of the log as possible and in a position where the surface has least possible hardness variation. This way the tag is securely compressed below the surface of the wood, which provides protection against mechanical stress. The estimated read range is 2-3 meters (2W ERP).

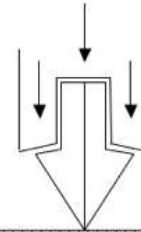


Other applications may be applicable but the material hardness needs to be taken into consideration when applying the tag. In order to apply the tag correctly, the designed tooling should support the IK tag firmly from its length and keep the angle straight at point of impact.

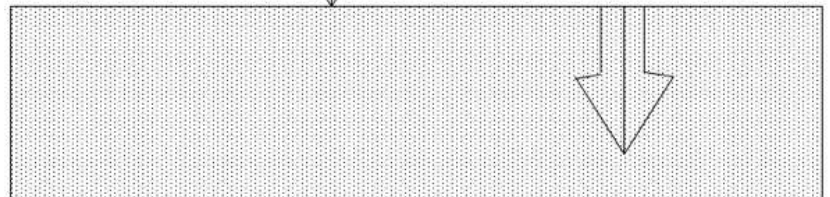
Confidex is currently developing tools for industrial use.

\*cut round log

Suitable method to install the tag is manual 'axe' tool with modified blade to hold the tag while hitting the log. Use tight fitting to tag in insertion tool. Apply force evenly to tag while inserting to wood.



Successfully installed tag is embedded to the cut end of the log from its full length to avoid damage during transportation and processing of the logs



## Contacts

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