The universal multi-surface transponders from Kathrein are designed to be insensitive to the materials to which they are attached. Equally good performance is expected on both metal and non-metal items. With their robust structure, they can be used successfully in harsh and high-temperature environments and have a high class of destruction resistance.

With the UCODE DNA, the transponders offer a combination of long-range UHF RFID performance coupled with cryptographic security functionality for tag authentication.
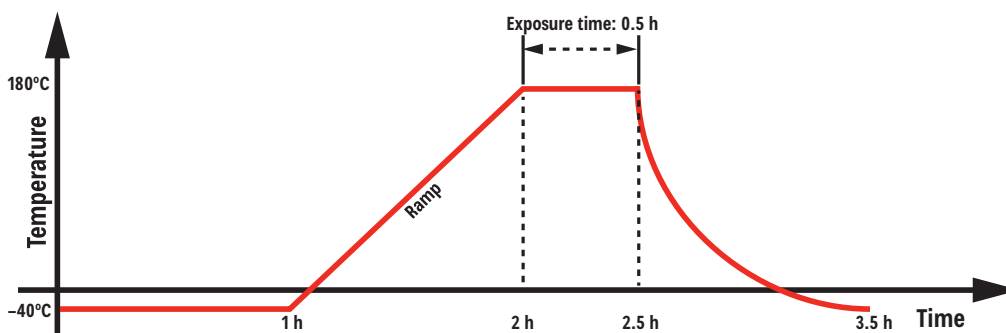
General Specifications

Order No.		52010371	52010372
Type		MTP-110-K-A	MTP-40-K-A
Frequency range	[MHz]	865–928	865–868
Dimension (standard)	[mm]	110 x 30 x 3	40 x 20 x 3
Operating ambient temperature range	[°C]	−40 to +85	
Temperature shock	[°C]	−40 to +180 (see *Max. Temperature Range*)	
Protection class		IP 67	
IK code		IK08	
Protocol		EPC Class1 Gen2v2/ISO 18000-63C	
Chip		UCODE DNA	
Memory			
EPC max.		224 bit	
User Memory		up to 3 kbit user memory (3072 bits) with BlockPermalock (depending on IC version and configuration)	
Unique TID		96 bit	
Serialisation		96 bit EPC	
Range	[m]	typ. 7 m on all surfaces	typ. 4 m on metal surface* typ. 1 m on non-metal surface
IT security		32-bit access password, 32-bit kill password	
AES authentication		128-bit AES authentication keys	

* A metal mounting screw can influence the performance

Max. Temperature Range

Key Applications

- Secure asset management
- Real-time location systems
- Access control
- Supply chain management

Note

Kathrein's multi-surface transponders are optimised to get a maximum read performance on a all surfaces.