



RFID TRANSPONDERS

Glass TAG

Intelligent solutions
for process automation
and logistics



Overview

Glass Tag is a family of passive contactless transponders that communicate with a reader via radio frequency. Glass Tags are well suited for all applications in logistics and process automation because of their very small transponder, reliable housing, high resistance to aggressive liquids, and good stability over temperature. Glass Tag's have the **best size/performance ratio and chemical resistance**.

Due to an optimum coil design and high performance ferrite, Glass Tags can be mounted in or on metal. Glass Tags are available in different sizes, ranging from 2.12 x 8mm up to 4 x 34mm and come with most of the low frequency ICs available in the Sokymat portfolio. Compared to other identification technologies such as barcode, RFID has the following advantages:

- No line of sight required
- Read/Write feature
- Several tags read at the same time (anticollision feature)

Applications

- Tool identification
- Pharmaceutical industry
- Inventory control and item identification
- Kegs and gas bottle identification



Glass TAG

Intelligent solutions for process automation and logistics

IC features

	Frequency	Coding Type Read Mode	Data Rate (Kbaud)	Unique ID number (UID)	Read/Write Memory	User Memory	Security	Anticollision	ISO Compliance	Key points
Unique	125KHz	Manchester	2	40 bits			UID & database	no	Defacto Standard	Laser ROM In use since >14 years
Q5	125KHz	Manchester Biphase PSK, FSK, NRZ	1 to 62	64 bits	330 bits	224 bits	Password mode, Write protection area	Answer On Request Mode	11784/785	Multi-purpose chip
Titan	125KHz	Manchester	2 or 4	2 x 32 bits	1024 bits	928 bits	32 bit password, Read&Write protection area	no		Selectable protection area
Hitag s	125KHz	Manchester	2, 4 or 8	32 bits	2048 bits	1984 bits	24 bit password, 48 bit secret key	yes	anticollision coding ISO 18000-2	256 or 32 bits on request

Glass Tag with other ICs, please contact SOKYMAT

Transponder Specifications

	Bio Glass Tag 2.12 x 8mm	Bio Glass Tag 2.12 x 12mm	Glass Tag 3.15 x 13.3mm	Bio Glass Tag 4 x 22mm	Bio Glass Tag 4 x 34mm
Diameter	2.12mm	2.12mm	3.15mm	4.0mm	4.0mm
Length	8 mm	12.0 mm	13.3 mm	21.7 mm	34.5 mm
Material	bio glass	bio glass	glass	glass	glass
Weight	60 mg	95mg	220mg	630 mg	1080 mg
Self Resonant Frequency (SRF)	140kHz	125kHz	131kHz (for Unique) or 125kHz	125kHz	125kHz
Operating temperature	-40°C to + 85°C	-40°C to + 85°C	-40°C to + 85°C	-40°C to + 85°C	-40°C to + 85°C
Peak temperature		120°C 100h	120°C 100h	120°C 100h	120°C 100h
Chemical	most chemicals	most chemicals	most chemicals	most chemicals	most chemicals
Shock & Vibration	IEC 68-2-6 / 29	IEC 68-2-6 / 29	IEC 68-2-6 / 29	IEC 68-2-6 / 29	IEC 68-2-6 / 29
Available IC	Q5, Hitag S	Unique, Q5, Hitag S	Unique, Q5, Titan, Hitag S	Unique, Q5, Hitag S	Unique, Q5, Hitag S



Granges, Switzerland

PHONE: + 41 (0)21 908 0100

FAX: + 41 (0)21 908 0101

www.sokymat.com

SOKYMAT

Industry & Logistics

© SOKYMAT reserves the right to change any information or data in this product information without prior notice.
The distribution and update of this document is not controlled.