

INDUSTRY Range

Electronic Tag

TAI20 IC SLI

www.balogh-rfid.com

DESCRIPTION

Radiofrequency tag made up of an electronic chip and an antenna.

- Standard : ISO 18000-3 mode 1, ISO 15693
- 4-bytes block are read/written
- Memory : 112 bytes + UID
- Frequency : 13.56 MHz



READING SYSTEM

Interface card + reader head:

- Field bus interfaces type Blxx170 MCMC and the read / write reader type TCF
- Programmable interface card CEPR(CF)96 Mc and TCF

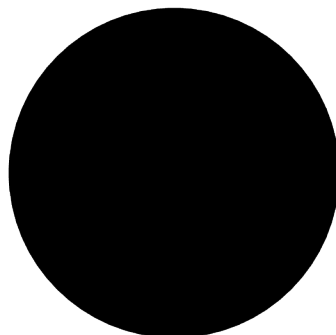
Interface card + reader monoblock:

- Field bus interfaces type Blxx 170 RmRm and monoblock MOFxxx M 485
- Network interface type BRMO80 and monoblock MOFxxx M 485
- Card CEPR(CF)96 Rm and monoblock MOFxxx M 485

Reader monoblock:

- The monoblock MOFxxx M 485 on RS485 protocol Modbus RTU

DIMENSIONS



← Ø20 mm ±0.5 →

height : 2.5 mm ±0.5mm

CHARACTERISTICS

TAI20 IC SLI <i>(TAG without metal ; reader on metal)</i>	MONOBLOC or E/R		
	MOF/TCF932	MOF/TCF100	MOF200
S _n "nominale" range (mm)	25	75	70
S _r recommended range (mm)	15	40	45
LS _r Length of transmission zone @ S _r (mm)	20	55	80
D _{tt} distance tags end to end (mm)	120	180	320
D _{er} distance transceivers end to end (mm)	120	110	260
D _{ef} distance transceivers face to face (mm)	120	110	260

min	nominal	max	unit
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Transmission Radiofréquence

Operating frequency	13,56	MHz
Reading time	5 ms/block of 4 bytes	
Writing time	10 ms/block of 4 bytes	

Memory

Memory capacity	112	bytes
UID	64	bits
Read endurance	100 000	cycle

General

Chip type	I-code SLI	-
Storage temperature	-40	90 °C
Operating temperature	-25	85 °C
Protection rating	IP68 - 20°C, 1m, 24h	-
Material	PA6 - food compatible	-
Vibration	IEC 68.2.6	-
Shock	IEC 68.2.29	-
Weight	1,3	g

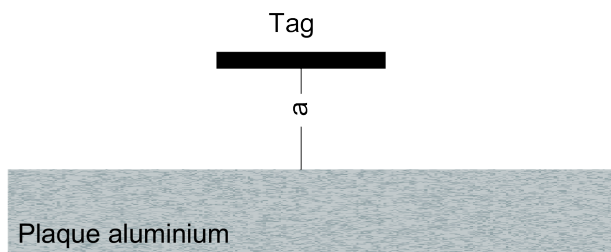
MAPPING

1st byte address for each block	Byte 1	Byte 2	Byte 3	Byte 4	Description	Access
0000H					User zone 112 bytes and 28 blocks	Read and write
0004H						
:						
:						
:						

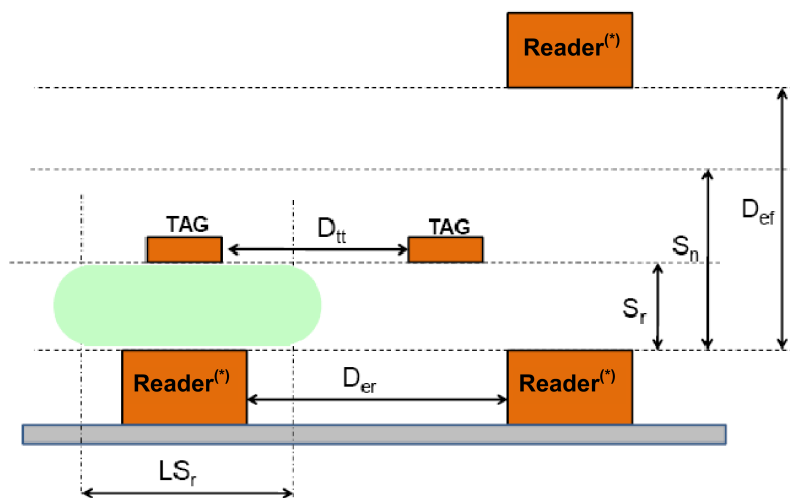
ASSEMBLY RECOMMENDATIONS

- **The tag is not to be mounted directly in a recessed metal cavity :**
A minimum metal-free clearance surrounding the tag is required as pictured

	MONOBLOC ou E/R		
	MOF/TCF932	MOF/TCF100	MOF200
a (mm)	10	10	85



- **Important:**
Except for bulk reading, a minimum distance (D_{tt}) must be maintained between two tags to prevent any reading or writing error caused by two tags of the same reader (D_{tt} is published in the reader data sheet) :



Transmission zone style
(the actual outline depends on the reader)

S_n	"nominale" range
S_r	Recommended range
LS_r	Length of transmission zone at S_r
D_{er}	Distance transceivers end to end
D_{ef}	Distance transceivers face to face
D_{tt}	Distance tags end to end
(*)	Reader or Monoblock

ACCESSORY

- Nobody