

IC Tag Integrated Bearing

ULTAGE



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Improved Maintainability Direct writing of electronic data



Features



## Record electronic data within the bearing itself.

112 English one byte characters can be read and written into Φ4.5mm IC Tag.



# The data can be read and written with dedicated Reader/Writer.

Compact and light weight Reader/Writer (PDA) will not choose the place for recording the data. (When applied out of Japan, the warranty of legality to Local Radio Law has to be confirmed.) Personal Computers can be used with specialized software.



# **Exclusive format is prepared.**

Exclusive format for information is prepared, but it can be adjustable to customers' request.

#### Applications

- 1. It can be possible to compare the information at maintenance to the original information.
- 2. It is possible to confirm previous maintenance date, operating hours and others by writing the latest information at the maintenance.
- 3. The historical data can be saved into PC and it enables to control bearing information of whole machines.(Pen type Reader/Writer is required for PC.)

#### **Dedicated format**

#### Standard format

Ex.: Input screen of bearing information

Inspection	
Product name	
Production factor	
Production code	<b></b>
Person number	<b></b>
← Read ← Write	

**1. Bearing information** Recorded by NTN at shipment time

#### Ex.:Input screen of bearing management information

ssembly information	Check information
Assembly day	Check info.
1	Check day
lachine number	- Operating time
	Grease supply CON COFF
Assembly person	Check person
	Last check info.
	Check day 120508
	Operating time 10000
	Grease supply OFF
	Check person NTN
🤆 Read 🧲 Write	C Read C Write
START	START EXIT

## 2. Bearing management information

Recorded by the user for maintenance record

"ULTAGE" (a name created from the combination of "ultimate", signifying refinement, and "stage", signifying NTN's intention that this series of products be employed in diverse applications) is the general name for NTN's New generation of bearings that are noted for their industry-leading performance. ULTAGE Series "IC Tag Integrated Bearing" allows electronic data such as maintenance record, information for replacement, quality records of the bearing saved directly within the bearing itself which can be used for every application.

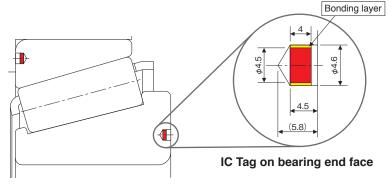
#### Applicable bearing

1. Applicable to bearings which have enough space to attach IC Tag. ( $\Phi$ 4.5×4)

A small hole will be formed on the end face of the bearing.

In case of small size bearings and thin section bearings, IC Tag could not be attached.

2. IC Tag is good for oil and heat, but if the bearings would be used under special environment, please contact NTN Engineering.



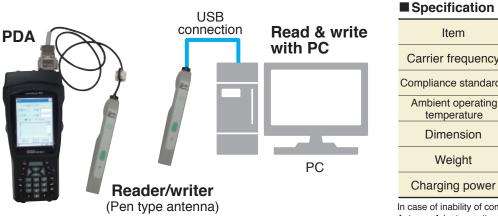
#### Specifications of IC Tag



#### Specification of IC Tag Specification Item Memory Capacity 112byte Including Quality information 10 years Data retention period Data rewritable time over 100,000 times 13.56MHz Carrier frequency Compliance standards ISO 15693 Communication distance $\sim 2 \text{mm}$ Ambient operating temperature $\sim 120^{\circ}C$ Dimension Φ4.5mm×4mm

Data retention period, data rewritable time and communication distance are reference values.

#### Specifications of reader/writer



#### Specification of reader/writer (PDA)

Item	Specificaion
Carrier frequency	13.56 MHz
Compliance standards	ISO 15693
Ambient operating temperature	-10°C~50°C
Dimension	79mm×164mm×25mm (3.5 inch)
Weight	320g
Charging power	AC100V~250V(50~60Hz)

In case of inability of communication, apply dedicated Antenna Adapter on tip of pen type antenna.

#### Status of compliance of reader/writer to Local Radio Law

Certified in Japan, Europe, USA, Canada, Mexico, Thailand, Vietnam, Singapore, Malaysia, Indonesia, Philippines, China, Hong Kong, Taiwan, and Korea. Under adjustment in Australia.

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