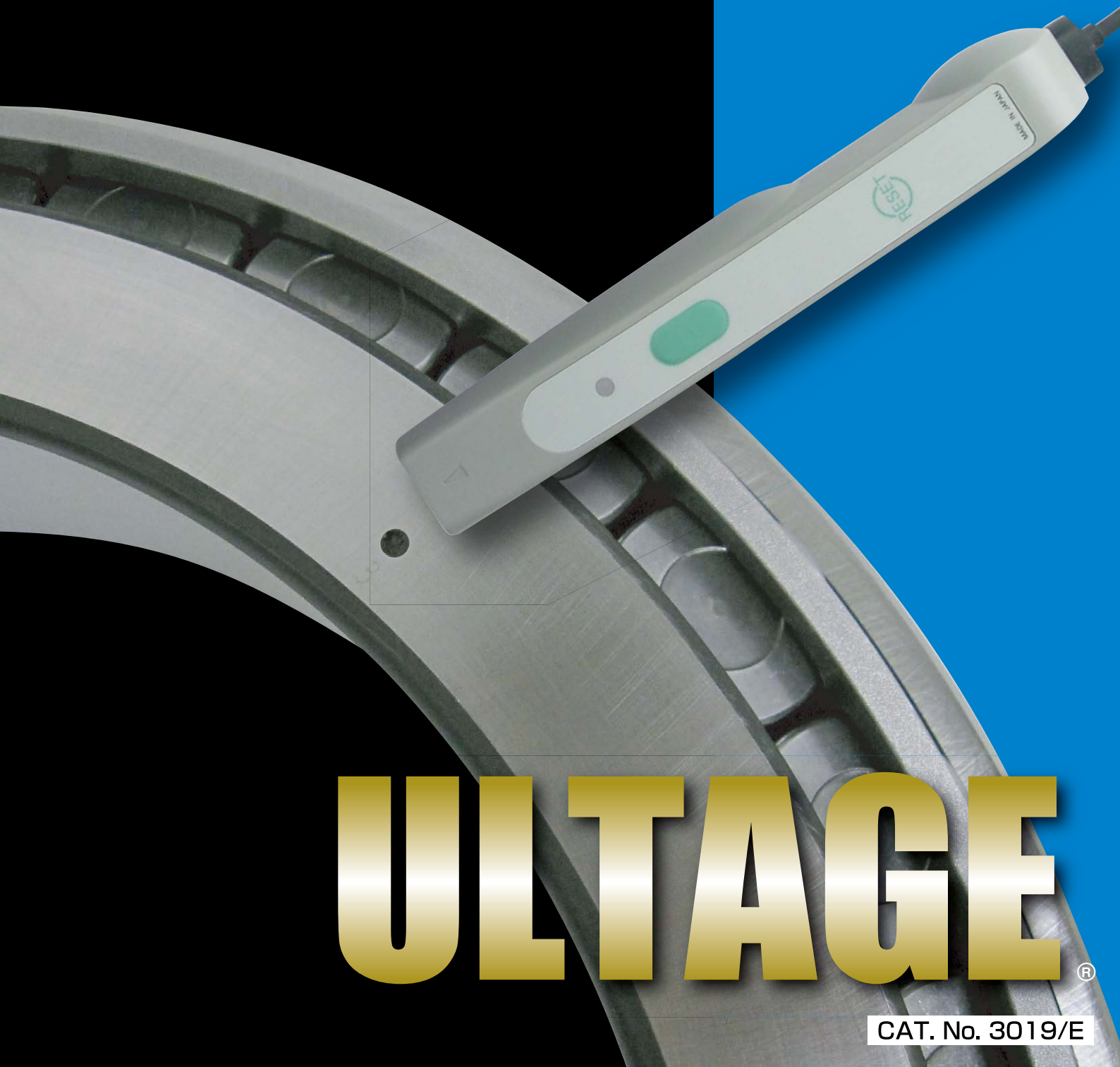


NTN[®]

IC Tag
Integrated Bearing

ULTAGE



ULTAGE[®]

CAT. No. 3019/E

ULTAGE[®]

IC Tag Integrated Bearing

Improved Maintainability
Direct writing of
electronic data

*First
in the
Industry*

Features

**First in the
industry**

Record electronic data within the bearing itself.

112 English one byte characters can be read and written into Φ 4.5mm IC Tag.

Compact

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.

Format

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

Shipment information

Inspection

Product name

Production factor

Production code

Person number

Read Write

START EXIT

1. Bearing information

Recorded by NTN at shipment time

Ex.: Input screen of bearing management information

Assembly information

Assembly day

Machine number

Assembly person

Read Write

START EXIT

Check information

Check info.

Check day

Operating time

Grease supply ON OFF

Check person

Last check info.

Check day	120508
Operating time	10000
Grease supply	OFF
Check person	NTN

Read Write

START EXIT

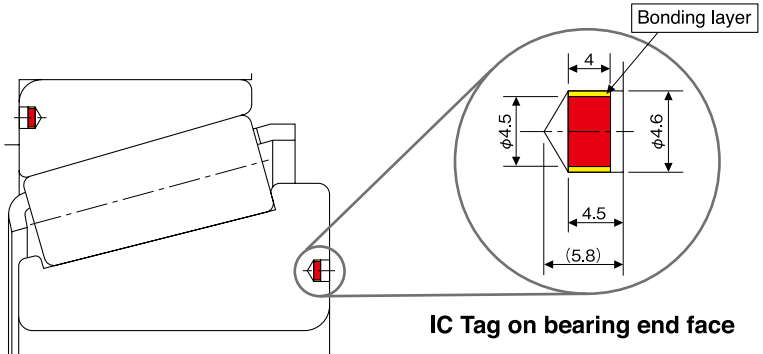
2. Bearing management information

Recorded by the user for maintenance record

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. ($\Phi 4.5 \times 4$)
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

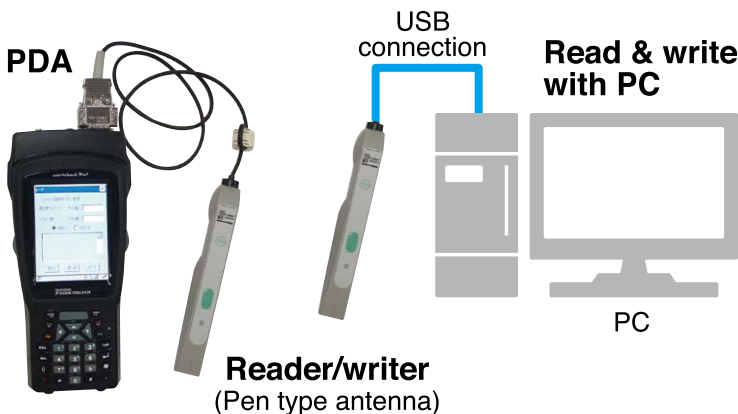


■ Specification of IC Tag

Item	Specification
Memory Capacity Including Quality information	112byte
Data retention period	10 years
Data rewritable time	over 100,000 times
Carrier frequency	13.56MHz
Compliance standards	ISO 15693
Communication distance	~2mm
Ambient operating temperature	~120°C
Dimension	$\Phi 4.5\text{mm} \times 4\text{mm}$

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.