

PRODUCT DATASHEET

HF NFC ON-METAL TAGS

ISO/IEC 14443 | 13.56 MHz

Brand / OEM:

Soochak Bharat Technologies Private Limited

1. Product Overview

Soochak Bharat **NFC On-Metal Tags** are specially engineered contactless tags designed to operate reliably when mounted directly on **metallic surfaces**.

Using an integrated **anti-metal (ferrite) layer**, these tags eliminate detuning effects caused by metal, ensuring stable read performance for **asset tracking, industrial identification, maintenance logs, and smart labeling** applications.

2. Key Features

- Optimized for direct mounting on metal surfaces
- Stable performance on steel, aluminum, and machinery
- Durable industrial-grade housing
- Waterproof and chemical resistant options
- Compatible with NFC-enabled smartphones and readers

3. Electrical & IC Specifications

Item	Specification
NFC IC	NTAG213 / NTAG215 / NTAG216 / Feiju F8213 (Optional)

SOOCHAK BHARAT TECHNOLOGIES PRIVATE LIMITED

Frequency	13.56 MHz
Protocol	ISO/IEC 14443 Type A
NFC Type	NFC Forum Type 2
Operating Mode	Passive (Battery-free)
UID	7 Bytes (Read-Only)
User Memory	144 / 504 / 888 Bytes (Chip dependent)
Data Retention	10 Years
Write Endurance	≥100,000 Cycles
Read Range	Up to 1–4 cm on metal (Reader dependent)

4. Mechanical & Material Specifications

Parameter	Specification
Tag Type	On-Metal NFC Tag

Housing Material ABS / PPS / Epoxy

Anti-Metal Layer Ferrite Sheet

Mounting Options Adhesive / Screw / Rivet

Color Black / White (Custom available)

Shape Round / Square / Rectangular

Thickness 1.5 – 5 mm (Model dependent)

Protection Rating IP65 / IP67 / IP68 (Model dependent)

5. Environmental Specifications

Condition	Range
Operating Temperature	–25°C to +70°C
Storage Temperature	–30°C to +80°C
Humidity	20% to 95% RH

Chemical Resistance Oil, grease, mild solvents

Shock & Vibration Industrial grade

6. Adhesive & Mounting

- High-bond industrial adhesive (3M™ or equivalent)
- Optional screw / rivet mounting for heavy machinery
- Works on steel, aluminum, iron, and painted metal surfaces

7. Personalization & Customization

- Laser engraving (Logo, Serial No.)
- Printed text & graphics
- UID / Data pre-encoding
- QR Code / Barcode (Optional)
- Custom size & form factor

8. Applications

- Industrial Asset Tracking
- Machine & Tool Identification
- Maintenance & Inspection Logs
- IT Asset Management
- Equipment Calibration Tracking
- Smart Manufacturing (Industry 4.0)

9. Compliance & Standards

- ISO/IEC 14443 Type A

- NFC Forum Compliant
- RoHS & REACH Compliant

10. Packaging Details

Item	Specification
Packing	Individual / Bulk Packing
Quantity	As per customer requirement
Shelf Life	2 Years

11. Handling & Installation Guidelines

- Clean metal surface before mounting
- Apply firm pressure for adhesive bonding
- Avoid installation on curved surfaces beyond specification
- Do not bend or crack the tag housing

Manufacturer / OEM

Soochak Bharat Technologies Private Limited

Industrial NFC • On-Metal RFID • Smart Identification Solutions

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