

# NFC Tags

*A Solid Proof for Guard Tour  
and Attendance*



Near Field Communication or known as NFC is a set of short-range wireless technologies, a common technology and a default feature that comes with most smartphones today. NFC adapts the concept of MiFare that allows data to be transmitted via radio waves with radio frequency 13.56MhZ and additionally; it also induces electric currents within passive components. On top of phone-to-phone communication, NFC tags are often used to store information from short texts like web addresses, contact details, bookmarks, geolocations and many more. It is a quick and efficient way to push information into your phone.

NFC tags are passive devices having no power supply of their own and are reliant on an active device to come into range before they could get activated. An NFC-enabled smartphone is one of the active devices that can power up NFC tags when the phone is in close proximity of around a few centimeters to the tag.

As a technology-driven developer for security products and workforce management systems, TimeTec taps on the NFC technology with the use of NFC tags in replacing the conventional checkpoint devices for guard tour, punch clock or biometric devices for time and attendance clocking.

## Usage of NFC Tags in TimeTec Cloud Solutions ([www.timeteccloud.com](http://www.timeteccloud.com))



### TimeTec Patrol [www.timetecpatrol.com](http://www.timetecpatrol.com)

The tags replace conventional guard tour checkpoints and they are readable by NFC-enabled Android smartphones installed with TimeTec Patrol App.



### TimeTec TA [www.timetecta.com](http://www.timetecta.com)

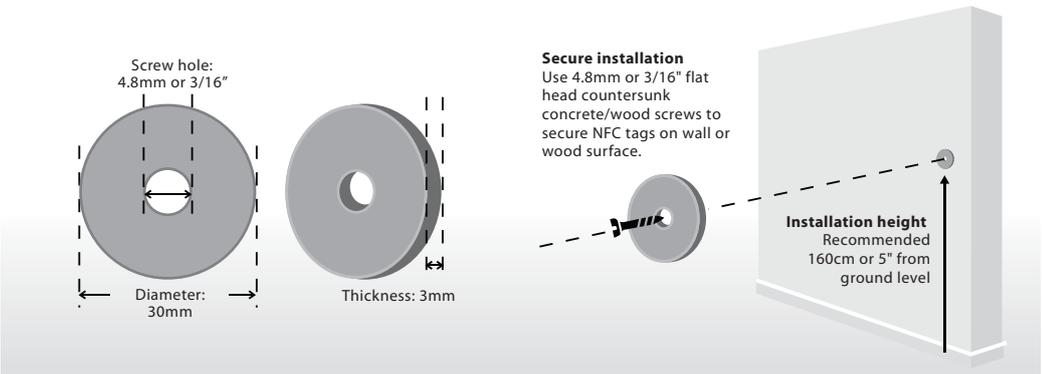
Users can tap on the dedicated tags for their attendance clocking activities on TimeTec TA by using NFC enabled Android smartphones complete with TimeTec TA App.



 **Installation Guide**  
[http://www.timetecpatrol.com/nfc\\_ig.php](http://www.timetecpatrol.com/nfc_ig.php)

**Installation Diagram**

*for illustration only*



**Mechanics of NFC Tags in TimeTec Patrol**



NFC tags are installed at regular intervals at each patrol route for monitoring purpose. Each guard is assigned with an NFC-enabled phone during his patrol rounds. When the guard places the phone near any tags, a signal is sent to TimeTec Patrol's cloud portal along with information regarding the identity, time, and exact location of the guard.

TimeTec Patrol cloud portal can be configured in such a way that if the guard is not punctual in his patrol rounds, either late or early clocking at predefined checkpoints, automated notifications can be sent to notify supervisors or the management about the tardiness for rectification.

TimeTec Patrol app is loaded with useful features for guards to perform patrol tasks, such as reporting of incidents, receiving adhoc tasks, and instant reporting during emergency; and with the app, monitoring of guards' locations in real-time is made easy. NFC still works in buildings with poor GPS reception because the location data associated with the NFC tags will be transmitted without delays when the phone returns to a location with good reception.



**Mechanics of NFC Tags in TimeTec TA**

Install NFC tags as specific locations for staff's attendance clocking and the staff needs to open TimeTec TA app on their smartphone and tap the phone on the tag to record their attendance. Work codes and/or activity codes can be assigned to label the worked hours on the employee timesheet. Arrivals, departures and break times are recorded via the smartphone on site, and the administrator can access TimeTec TA cloud solution and get the real-time data for further analysis. The deployment of NFC tags and smartphones in today's BYOD or Bring Your Own Device environment gets you to save on the hardware cost for time clocking and it brings convenience to both employer and the staff alike.



TimeTec Patrol App



Android



TimeTec TA App



iOS Android

**SPECIFICATIONS**

DESIGN	Anti metal gas tank, weatherproof
SIZE	30 mm x 3 mm
MATERIAL	ABS
COLOR	Black
SURFACE FINISH	Matt
SILKSCREEN PRINTED WITH	www.timeteccloud.com
CHIP	NXP NTAG 213
IC PROTOCOL	ISO 14443A
FREQUENCY	13.56 MHz
WORKING DISTANCE	≤ 4 cm
OPERATING TEMPERATURE	-25°C to 70°C
STORAGE TEMPERATURE	-55°C to 125°C
MOUNTING METHOD	Adhesive sticker or screw
MOQ, MINIMUM ORDER QUANTITY	20 pcs

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