

# Beyond Biometrics



Smart businesses  
connected to  
TimeTec Cloud Applications





## FOREWORD: **CLOUD** TRANSFORMATION

Transformation is normally a very hard and slow process, especially when our customers have been long spoiled by our own free-software-and-pay-only-the-hardware sales strategy. How to convince them that cloud applications are worth paying for, and even worth paying every year? It took us two full years of sweat and effort to achieve the effect, then out of a sudden, it's BOOM! It seemed like history is repeating itself, I recalled when our fingerprint system sales surged in 2005 after 4 years of struggle, and now we have a long line of cloud attendance customers signing up and waiting for the implementation, it's happening for the past few months, and topping 4 folds of cloud sales increment in 2018 compared with the previous year's. The outlook definitely looks good for SaaS (Software as a Service) in 2019, and since we have multiple vertical cloud solutions, it looks even better.

In 2017, the global SaaS market was estimated to be worth \$58.6 billion USD, with projections for 2018 reaching \$71.2 billion USD. And this explosive growth doesn't seem to be slowing down anytime soon, with the prediction of \$85.1 billion in 2019, forecast for 2020 projects the worldwide SaaS market to be worth nearly \$100 billion USD.

Many factors contributed to the rise of the SaaS market, for example, the strong demand of vertical SaaS solutions, the increase of acceptance for subscription based model, the need of immediacy in rolling out of a new system, a BYOD and mobile-first working environment is gaining momentum, and etc. "The increasing adoption of SaaS applications and other cloud services impact the management, dissemination and exploitation of enterprise content," added Craig Roth, research VP at Gartner, a world's leading research and advisory company.

Besides our proud time and attendance cloud solution, we also developed a leave management system, a recruitment system, a visitor management system, an access control system, a guard patrol system, a smart community system, all aimed at vertical cloud, which focus on a niche market and we have been getting substantially higher valuations than more typical horizontal SaaS platforms that offer their services to a broader market.

SaaS solutions have the capability to create infinite amount of consolidated customer data, and data is the fundamental of machine learning and artificial intelligence (AI), SaaS companies can develop a positive feedback loop, using anonymized data inputted into AI to continue product development in order to deliver an overall better service for customers. We at TimeTec, have started the AI journey, developed an AI robot, which we named Hubot to improve Visitor Management System; and also a Guard Tour Hubot to replace security guards on that purpose. Prototype is expected to be ready in the second quarter of 2019.

At TimeTec, we value the ongoing efforts to improve our SaaS ecosystem when our customer base is growing over time. We have to keep the customers engaged, control the churn rate to the minimum, increase upsells and cross-sells, and propel them from a trial state to

being a subscribed customer quicker. We also understand the hyper-personalization trend, especially when paired with AI to achieve better automation, can provide customers with added value, while boosting the subscription.

In 2019, we will introduce TimeTec Access and we hope it would be a disruptive solution to the conventional access control market, creating a new trend for Access Control as a Service (ASaaS). Along with the system, TimeTec BLE-5 as its core IoT hardware will be unveiled too, which will open a new chapter for smartphone as a credential for users. Furthermore, a new breed of facial recognition and fingerprint verification stations running on Android, as the terminals for clocking and access control, will also be introduced in 2019, to provide plenty of choices on hardware and improve user experience for our cloud-based solutions.

Moreover, we have upgraded TimeTec TA API, and likewise released i-Neighbour API, along with the launch of BLE SDK last year, this allows any third party systems to integrate with our IoT and cloud applications, expand the overall connectivity to build a larger cloud ecosystem.

It's no surprise that security will continue to be an issue with cloud technology, especially now with the introduction of the General Data Protection Regulation (GDPR). Thanks to our ISO/IEC 27001 certification, it reduces our workloads when tackling the tasks relating to compliance.

After being granted CMMi level 3 in 2016, our R&D continues to implement DevOps, a software development methodology that combines software development with information technology operations, which we think can shorten the system development life cycle while also delivering features, fixes, and updates frequently in close alignment with business objectives, and we expect to complete the DevOps task in 2019. All these efforts will uplift us and improve our capability to develop better cloud solutions.

With all the hype of cloud computing, I hereby declare 2019 as the Cloud Computing Year for TimeTec. We welcome our customers and partners to join us, and together we prosper.

Teh Hon Seng  
Group CEO of Timetec Computing Sdn Bhd  
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2018 is most certainly a dynamic year for TimeTec as we not only unveil, but also enhance our various Smart Solutions for the Workforce Management and Security Industries. From the launching of new products to the filling of new patents, let's explore some of the spotlights as we progress through the year again along with FingerTec Biometrics.

### FINGERTEC BIGGER, BETTER FACE ID X



The new Face ID X is FingerTec most powerful facial recognition biometrics solution for your workforce management. What separates this device from the other products is that other than the 4 versatile clocking options included (Face, Fingerprint, Card, Password), Face ID X also supports a massive storage capacity of 30K face templates with 1:1 verification, 50K fingerprint templates, 10K card templates and a monumental 1 million transaction data; effectively making it a next level face recognition machine.

### LAUNCH OF i-NEIGHBOUR API

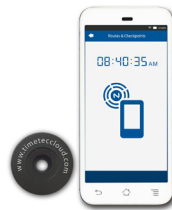


In early June, i-Neighbour has launched an Application Programming Interface (API) service, which will better enable third-party application developers to integrate with i-Neighbour. This provides a complete set of interfaces for companies to access their organization's information via simple, powerful and secure application programming interfaces.



### TIMETEC INTRODUCES BLE SERIES FOR i-TIMETEC AND i-NEIGHBOUR

TimeTec is a company that progresses leaps and bounds by tapping on the readily available technologies. Hence this year, we introduce the BLE Series within i-TimeTec and i-Neighbour to promote a smart workplace and lifestyle. Labelled as BLE-2 and BLE-16 respectively, BLE-2 is a Gate Control Relay Board that acts as an intermediate between i-TimeTec or i-Neighbour and a door/barrier gate controller. While for BLE-16, it is a Lift Control Panel which uses Bluetooth Low Energy 4.2 technology for lift access.



### TIMETEC GRANTED NFC CLOCKING PATENT AND MORE

TimeTec has been successfully granted with a new patent by the United States Patent and Trademark Office. Specifically, the patent involves the recording of electronic attendance from mobile devices on NFC Tags. Still, it does not end there as TimeTec has likewise taken the step to file for more patents this year, namely "A Method for Secured Delivery Service", "Method for Recording Attendance Using Bluetooth Enable Mobile Devices" and etc



### TIMETEC RECEIVES ISO27001: 2013 CERTIFICATION

On 8th March 2018, TimeTec has successfully acquired certification for one of the most important Information Security frameworks, that is ISO 27001:2013. With this in placed, TimeTec now has the freedom to expand and innovate, all while being assured that our clients' data are safe and secured.

## TIMETEC HUBOT AND i-NEIGHBOUR LAUNCHED BY MALAYSIA PRIME MINISTER IN CITIES 4.0



In September, the i-Neighbour Team participated in the Cities 4.0 event. It is here where TimeTec decided to unveil our latest robotic assistant and that is TimeTec Hubot for visitor management in a neighbourhood. Our esteemed Prime Minister of Malaysia, Tun Dr. Mahathir Mohamad graced our booth and launched both i-Neighbour and TimeTec Hubot at the event.

2018

MILESTONES

## TIMETEC BEING A PROUD MEMBER OF MRCA



TimeTec was duly awarded with a Certificate of Membership during the MRCA's monthly event that was held at Menara Maxis, Kuala Lumpur on 24th November 2017. Hence, TimeTec is now an official Associate Member of Malaysia Retail Chain Association (MRCA). With this latest affiliation, TimeTec will now get to enjoy the many benefits of MRCA, such as attending the Monthly Meeting Event that is aimed to provide members of the association with "Enriching Talks & Business Presentations".



# PRODUCT HIGHLIGHTS

**timeTec**TA  
 Time & Attendance  
[www.timetecta.com](http://www.timetecta.com)



**TIMETEC TA**

**GEARING WORKFORCE WITH SMART ATTENDANCE**

Do you find it difficult to manage and monitor the growing workforce in your company? Do you have this constant question mark at the back of your head, wondering whether your workforce has been optimized to the company's advantage? Do you want to take that leap of faith and automate your processes? We think it's about time that you do!

**SMART TIME ATTENDANCE**

Let TimeTec TA into your organization and let it simplify all your concerns by automating attendance. What's more, TimeTec TA processes attendance data to give you the comprehensive overview of what matters in your company; with access to the updated data at all times. With TimeTec TA, we give you the clear picture of your workforce constantly!

 <b>ASSESS PRODUCTIVITY</b> Time vs Production	 <b>DISCIPLINE</b> Tardiness, Punctuality, Time Abuse	 <b>COSTING</b> Daily Wages, Overtime	 <b>WORKFORCE DELEGATION</b> Normal Day, Crunch Time	 <b>EASY MANAGEMENT OF SHIFTS/SCHEDULE</b>	 <b>MONITOR WHEN NECESSARY</b>
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**COMPANY PROFILE & ORGANIZATION STRUCTURE**

Create the Framework of Your Company From the Get Go  
Creation of Company Profile and multi-layer divisions based on organization structure of a company; TimeTec TA caters to all to ease user management throughout the system.

**EMPLOYEE SELF-SERVICE**

View Your Own Data  
Employees get the rights to view their own data, at their own time, on App.

**BASIC ATTENDANCE RULES**

Rules are for Everyone  
Input your basic attendance or clocking rules based on the company's attendance policy and the system is made flexible to cater to a variety of rules. Centralize and control all of them from one point.

**CHECK-IN RULE/CHECK-OUT RULE**

Clock-In, Clock-Out, Clock Right  
Do you allow grace period in check-in and check-out? If yes, for how many minutes to not be considered late or early out? TimeTec TA leaves it to you to determine your rules.

**ATTENDANCE REPORTS AND CALCULATION**

Accuracy Assured  
Get all processed data and calculation accurate everytime.

**EMBEDDED HR INTEGRATION**

Pay On Time, Everytime!  
Embed the processed attendance data to payroll for effective payment preparation.

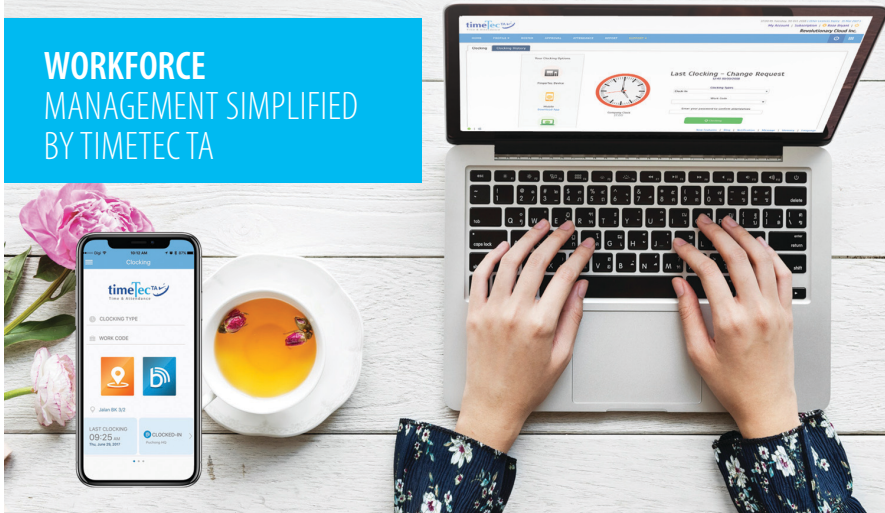
**NOTIFICATION**

Instant Notification  
Set to alert and notify users/admins for important data and messages.

**REPORTS**

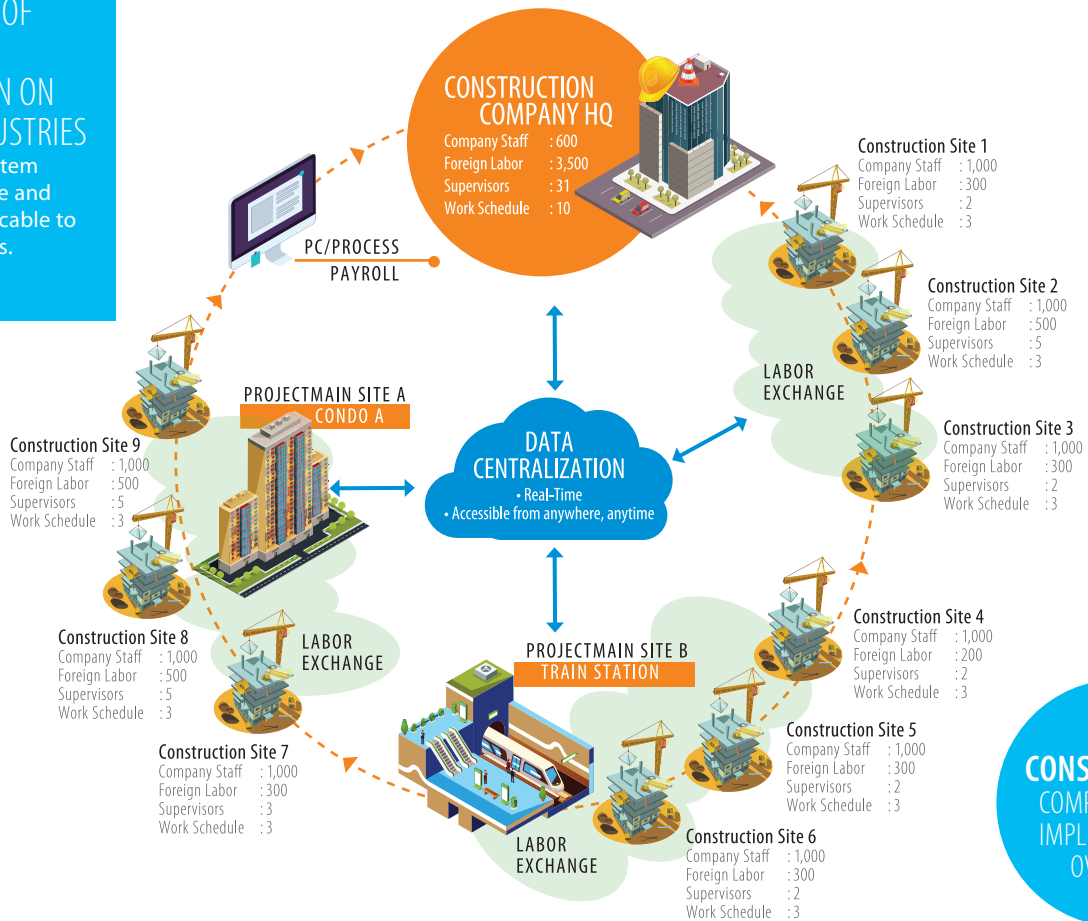
Report it Right  
Produce various presentable reports, i.e. Electronic Time Card, Tardiness, Job Cost Analysis, Attendance Summary and more.

**WORKFORCE MANAGEMENT SIMPLIFIED BY TIMETEC TA**



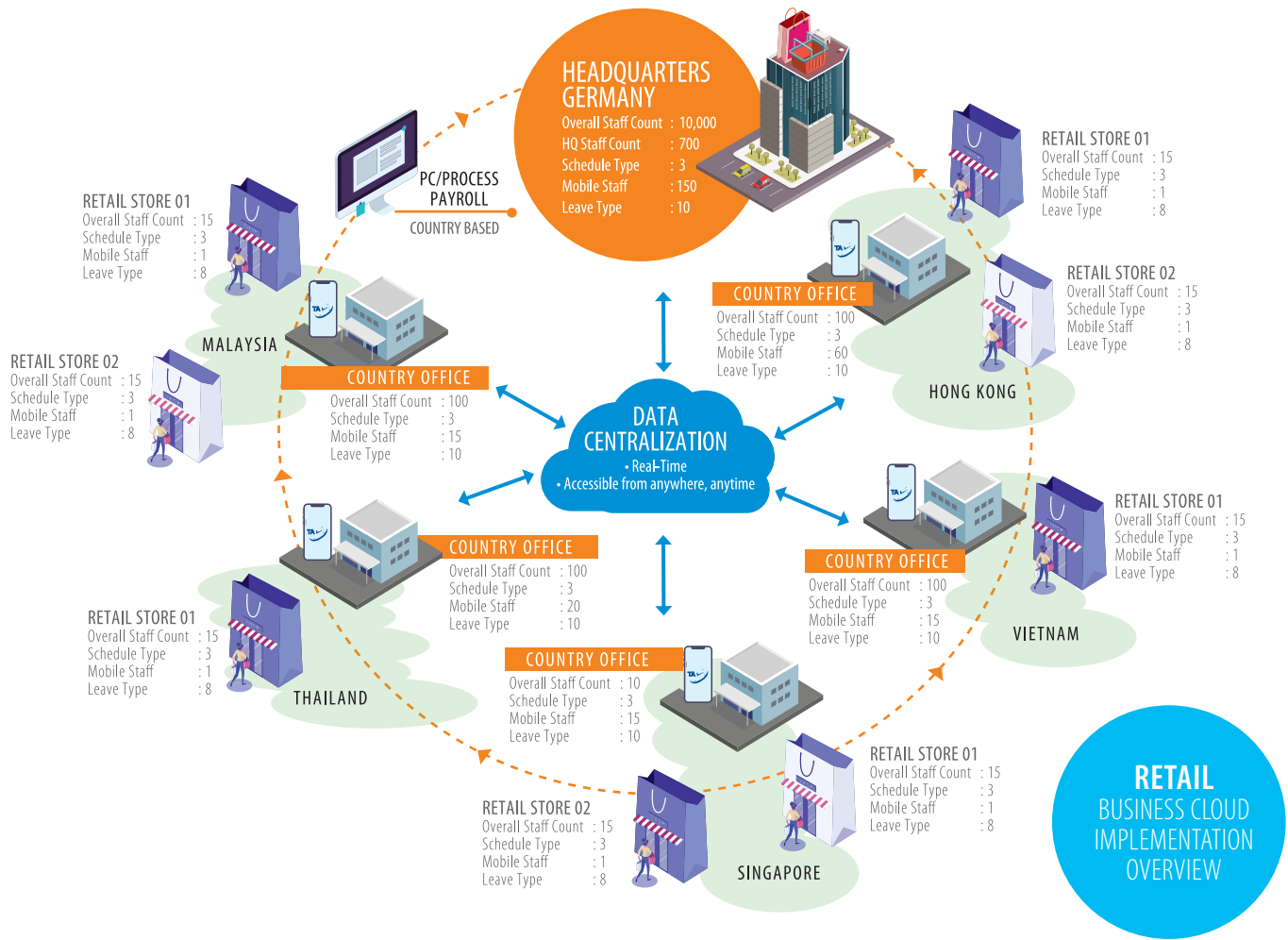
**OVERVIEW OF TIMETEC TA APPLICATION ON MAJOR INDUSTRIES**

TimeTec TA system is made flexible and versatile, applicable to most industries.



**CONSTRUCTION COMPANY CLOUD IMPLEMENTATION OVERVIEW**





START TO TIME, START TO THRIVE



Workforce has become more dynamic than ever before with organizations having employees who are mobile, work from home, have flexible work hours, and companies having to cope with businesses' demands for employees to work longer hours, to work in different shifts, to take extended shifts, and many more. While other attendance systems do provide solutions to the problem, nothing works as efficiently as a cloud system that enables the company to collect the data seamlessly, process it efficiently, store it securely and provide access to the data freely yet safely. For companies who are ready to change attendance solution, the choice is clearly cloud like TimeTec TA.



# TIMETEC LEAVE

SIMPLIFYING LEAVE MANAGEMENT ONE TAP AT A TIME



## WHAT IS LEAVE MANAGEMENT

Leave Management is a crucial HR process whereby the employees can request for a period of time off from work based on the company's policies as well as according to the established labour laws. Despite its being labelled as a 'commonplace' within the workforce, the task of handling every employee's leave can still be very time consuming without any automation involved. Worse still, is the fact that it has the potential to incur huge financial losses if not taken care of properly. With that said, the issue discussed only pertains to the HR Department side of the company, while the problem persists even for employees and employers.



## CONVENTIONAL LEAVE APPLICATION ISSUES

-  Manual Filling of Application Form
-  Slow Processing And Only During Working Hours
-  Vague Leave Balance
-  Can't Plan Ahead Due To Application Disapproval

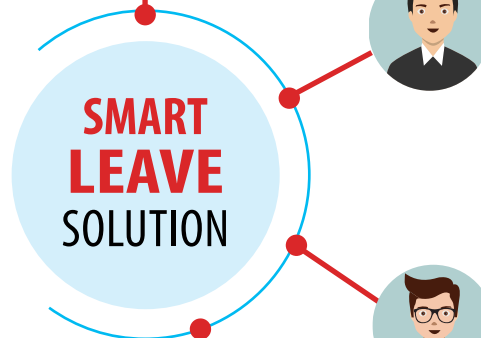
## EMPLOYERS' DILEMMA

-  Additional Workload For HR
-  No Employee Leave Overview
-  Employee Absent During Crunch Time
-  Unknowingly Violate Labour Laws



### HR PERSONNEL

- Add Users
- Set Approval Methods and Approvers
- Set Leave Policy and Allowance
- Add Crunch Time
- Generate Report



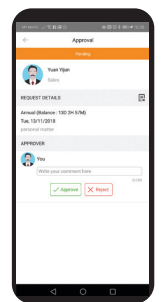
### EMPLOYEE

- View Leave Balance and Allowance
- Apply Leave
- Cancel Leave
- Apply for Replacement Credit
- Instant Notification on Application Status
- Leave and Holiday Information (Calendar View); limited to own division



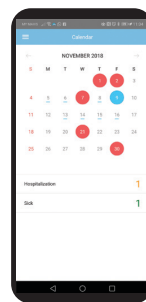
### SUPERVISOR

- Receive Notification on Leave Application
- Review, Approve or Reject Application
- Leave and Holiday Information (Calendar View); limited to own division



### MANAGER

- Holiday and Leave Information for all Employees Leave (Calendar View)
- Overview of Employees' Leave Balance
- Review, Approve or Reject Application
- Generate Report

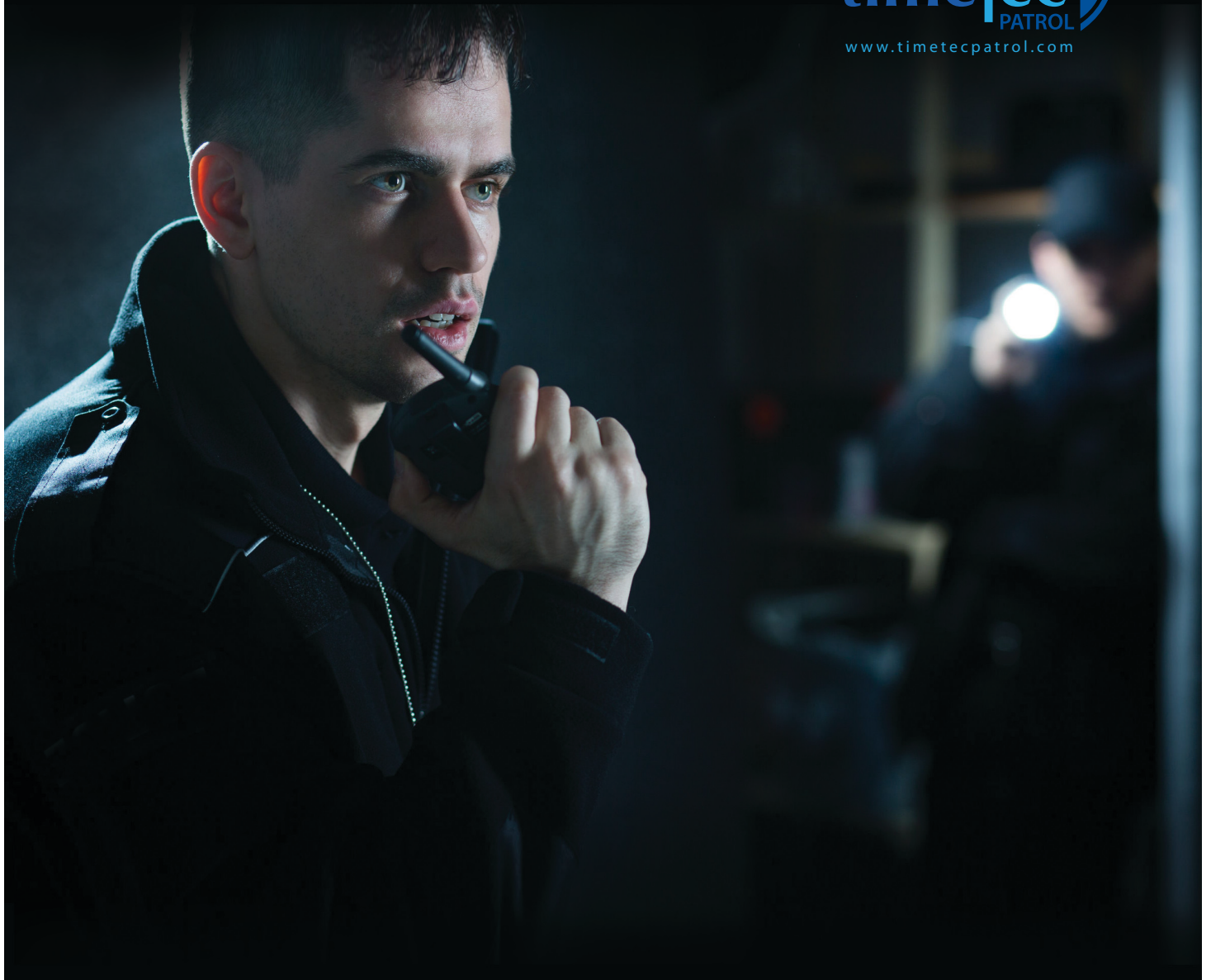


Why put up with occasions such as these? Which are almost always not beneficial for both employers and employees, especially when we are living in the present-day digital era. Solve all these problems with TimeTec Leave, our Cloud-Based Leave Management Solution. For a more effective time out and productive time in, TimeTec Leave even offers a Mobile Application version too, which you could easily download and install from the App Store or Google Play onto your smartphones or tablets to achieve seamless and convenient integration of the software, thereby making implementation along with your leave procedures a breeze.

## SMART TECHNOLOGY IS THE FUTURE

Times have changed and disruptive technologies are here to nudge us to keep up with the technology trend because for those who are disrupted and didn't do anything about it, could be left behind and become irrelevant. What's more, employee's leave has to be managed properly and in compliance with the labor law of a country. Therefore, companies can't afford to make mistakes in calculating the leave balances and accruals for each employee. Look no further as our cloud solution is the next generation solution towards better leave management thus providing companies with the opportunity to save precious time and reduce any unnecessary cost. It's time to shift the complex and tedious leave management solution into a more simpler yet accurate leave management software on cloud with TimeTec Leave.





# TIMETEC PATROL

SECURITY REINVENTED, REFINED AND REINFORCED

The duty of managing security guards can be a daunting task, especially if the aspect of security is on the line at all times. Problems such as guards arriving late for their jobs, being unsure of their patrol routes or worse still, bailing out on their post are all crucial factors that one needs to take into account when operating within the security industry. Left unchecked, these occasional setbacks will create a snowball effect that would be detrimental to an organization. Which is why, TimeTec offers a smart solution that could very well be the 'savior' of your company. TimeTec Patrol is a cloud guard tour system designed to manage a company's security. It is a system that positions guards on specific patrol routes to surveil companies' assets and environments within the given time intervals thus constantly ensuring the security of the surroundings.



## SMART PATROL FEATURES



### SAVING BY AUTOMATION

Too much time is wasted on manual processing of patrol round details and too much money is spent on unnecessary workforce to carry out manual tasks. By automating patrol scheduling, incident reporting, time keeping of patrol rounds, a lot of time and money can be saved instantaneously.



### DATA IS INTACT

Keeping all data in the cloud server ensures its safety because no unauthorized individuals can compromise it. Nobody can alter the data without a trace in the system and the absence of a physical server on site keeps the data secure and untouchable.



### SYSTEMATICALLY SCHEDULED

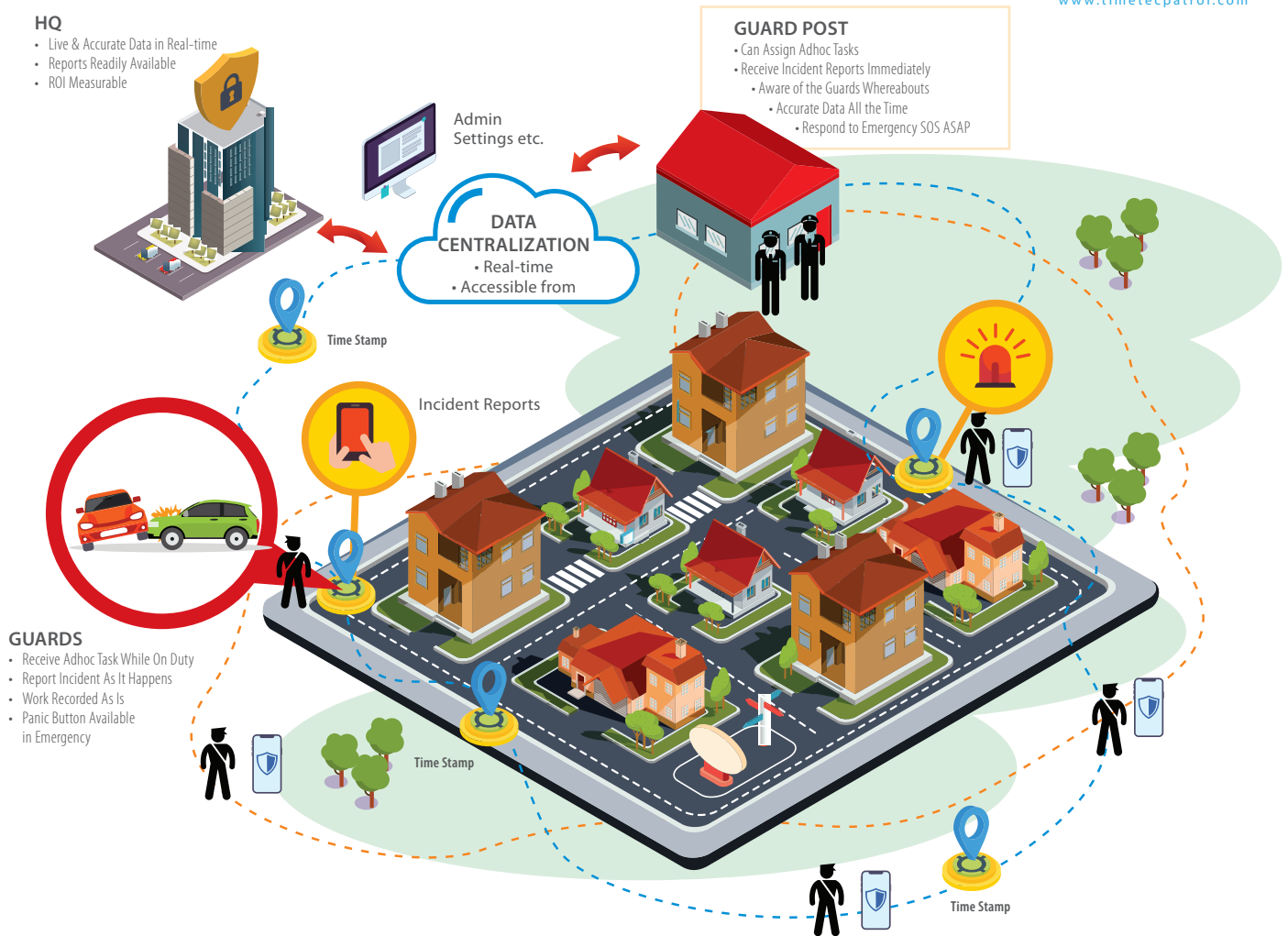
Different sites require different schedules and timing. TimeTec Patrol can cater to that complexity without hassle because the persons in charge can arrange the schedules way in advance and cope with the changes swiftly without compromising the other schedules in the system.



### SYSTEM SCALABILITY

With a cloud guard patrol system, you just pay for what you need, and you can add or reduce according to the requirements without having to deal with huge lost i.e. dealing with server investment and other hardware tools.

## MONITOR YOUR GUARDS IN REAL-TIME WITH TIMETEC PATROL



When security is indeed your business; get your investments worth by choosing TimeTec Patrol. With our Smart Solution, the possibilities are endless as TimeTec Patrol is developed as a cloud-based system without versioning limitation; meaning it is able to take into account the feedbacks received as well as provide customers with the required results; all for an affordable monthly subscription fee. Nowadays, security companies should always stay vigilant not only towards the services provided but also to the market trends as well in order to stay relevant and get ready for the future.



# i-NEIGHBOUR

SMART LIFESTYLE FOR SMART COMMUNITY

## INTRODUCTION TO A SMART COMMUNITY SYSTEM

Nowadays, the presence of the Internet has become somewhat synonymous with modern lifestyles or as we like to put it, the Internet is ubiquitous within our daily lives. Despite the phenomenon, many residential communities still depend on the conventional logbook to handle its visitors. Hence, visitors often have to wait in long queue before getting their records manually filled. The reason for this is because it is perceived as fast and easy. However, this particular procedure tends to overlook two important facets in which the digital age often demands: Privacy & Security.

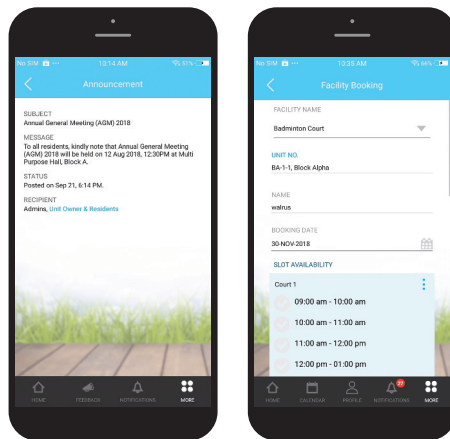
Paving the way into this digital transition is our latest cloud solution: i-Neighbour, which is developed to assist in the management of residential dwellings regardless of whether it is a high-rise residence or gated guarded community. Built entirely by Malaysian company TimeTec, what sets this smart product apart from the other solutions is the fact that it can be implemented with a vast array of Internet of Things (IoT) devices. From residential management right down to security management, i-Neighbour has it covered.



## RESIDENTIAL MANAGEMENT

i-Neighbour acts as a platform for both the Management and Residents within a neighbourhood to communicate as well as share vital information via cloud services. Instead of delivering every important announcement in hardcopy, i-Neighbour utilizes the capabilities of the Internet to send out any announcement via push notification on mobile application. In doing so, Residents are then able to immediately access this information on their smartphones.

Besides that, Residents can also make use of i-Neighbour App's handy feature such as Facility Booking, to place their bookings on facilities installed in the vicinity with just a few simple taps. This will not only help the Management better facilitate the community's needs but likewise promote a Smart Lifestyle. Since Residents are given the option to access all entrances via smartphone, the Management can likewise save cost by removing the need to issue the conventional access cards.



## VISITOR MANAGEMENT



Visitor Management is the first line of defence in preventing unauthorized individuals from entering the neighbourhood. With i-Neighbour, a cloud-based system now plays the important role. How it does this is that it allows the deployment of TimeTec Guardhouse Tablet Panel to easily capture every visitor information while the installation of the Smart Barrier provides prompt vehicle access. No more long queues at the guardhouse as everything is now automated. In doing so, the Visitor Management becomes a seamless process with traceable records made available within the Mobile App and Web Portal of i-Neighbour.

## SMART RESIDENTIAL COMMUNITIES: PRINCIPLES, PRACTICES & PRACTICAL GUIDEBOOK

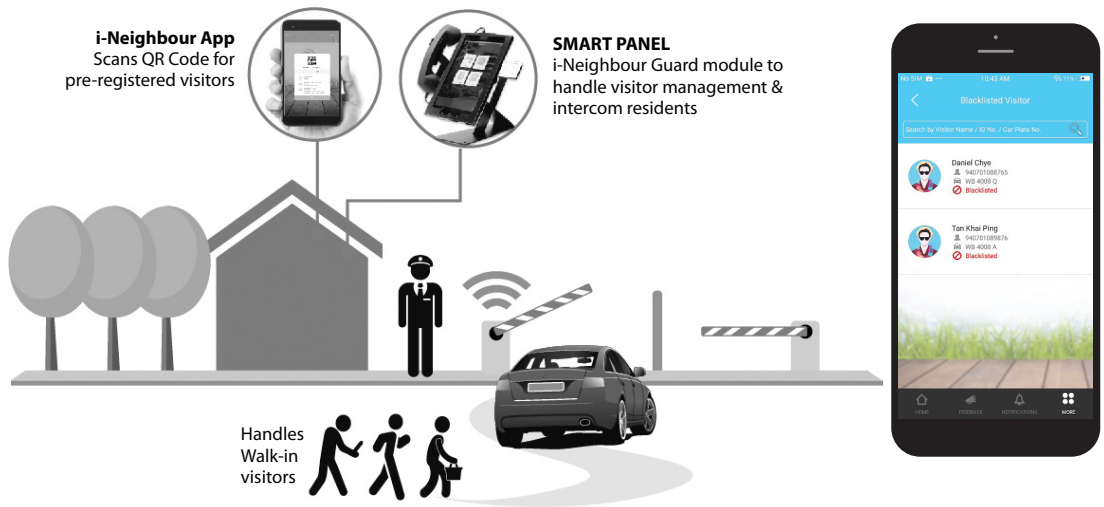


This year, TimeTec published a book titled "Smart Residential Communities" to better introduce the concept of Smart Residential Community. In it, i-Neighbour CEO and experts share how to plan and implement a Smart Residential Community. This guidebook is a collaborative discussion written to serve as a useful reference for housing developers, property managers, management committees, interested parties and readers. It contains 5 Parts, split into 20 Chapters, giving the comprehensive views from the basic definition of Smart Residential Community to hands-on guides, security measures, technological aspects, and its future development.

Get your copy today by purchasing it at our website at:  
[www.i-neighbour.com/SmartResidentialCommunities](http://www.i-neighbour.com/SmartResidentialCommunities)



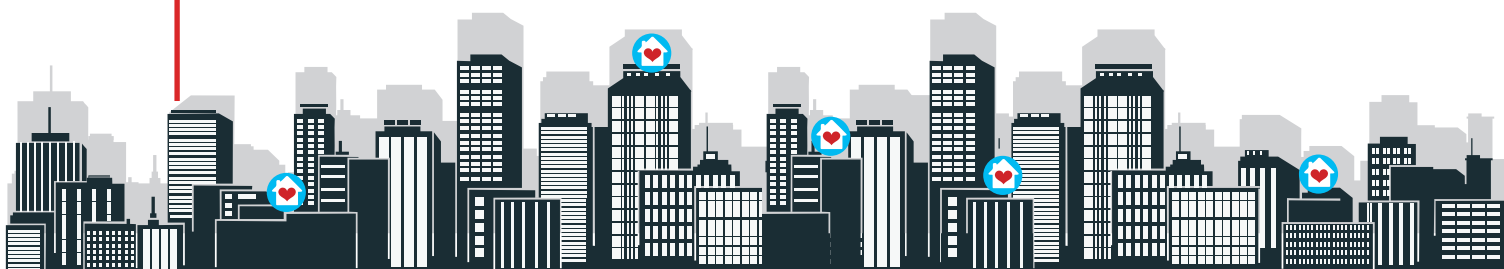
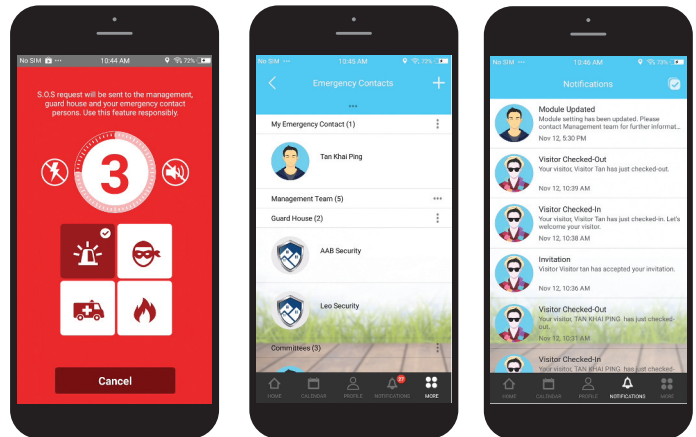
## VISITOR MANAGEMENT



That's not all, Residents can also invite their friends or relatives by pre-registering them beforehand for a smooth passage into the neighbourhood. This is especially useful during the festive seasons. On the other hand, i-Neighbour also provides real-time monitoring for the Management to review the list of individuals that are entering into the neighbourhood.

## SECURITY MANAGEMENT

With such an ecosystem taking place, a Smart Community System is never complete without the inclusion of a Security Management as well. What's good with such a system without an alert function; for this case, i-Neighbour allows the Residents to trigger a warning alarm during an emergency. This feature known as the Panic Button will trigger a loud siren alarm whenever it is activated by the Residents during an emergency situation. Additionally, individuals added as the Emergency Contacts will likewise be instantly notified regarding the situation at hand; this allows for the Residents to receive the required assistance as soon as possible.





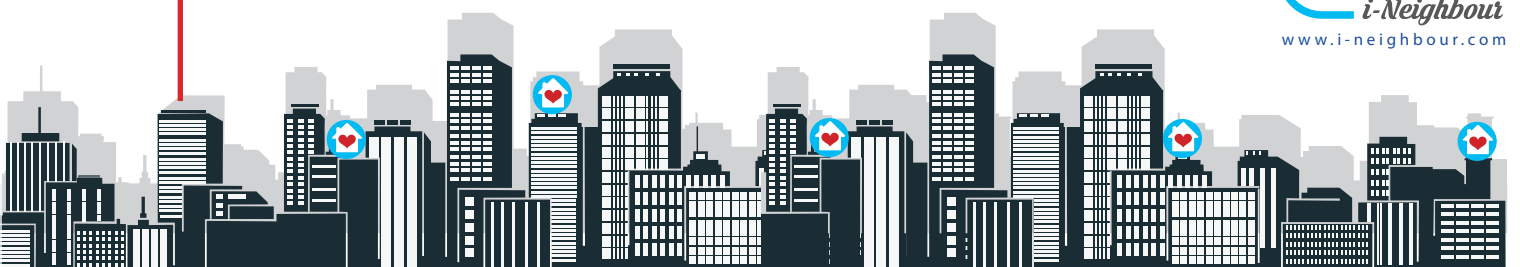
## SMART INTEGRATION



i-Neighbour isn't just a Smart Community System. Apart from having useful features of its own, i-Neighbour is capable of integrating with not only IoT but also other TimeTec Solutions and, i-Environ as well; an Intelligent Environmental Sensing that is jointly developed by i-Neighbour and i-Radar.

## SMART LIFESTYLE FOR SMART COMMUNITY

i-Neighbour main goal is to provide the community with a Smart Lifestyle along with the best user experience. The idea here is to allow technology to bring the kind of convenience that is fundamental within this modern era; all without discounting Privacy & Security. With Cloud as its architecture, the only thing being discounted here is the pricing itself; being scalable regardless of high density residential or low density neighbourhoods. That is why i-Neighbour stands out from the rest and is the future of Smart Living.





# TIMETEC ACCESS

SMART ACCESS, MOBILE AUTHENTICATION

TimeTec Access is a new access control system, powered by IoT. We combine the use of the Internet, Cloud Computing, Edge Computing, Mobile App and a simple door controller to develop a new IoT access control system. The first step is to reduce the hardware/component in the system, which is the computer and access control reader/controller. This reduces the system setup, installation and maintenance costs. The second step is to change the form of credentials and it should be something unique but easily accessible, secure, cannot be duplicated and equipped with great processing power.



IoT INTEGRATED  
TIMETEC ACCESS  
SYSTEM



POWERFUL  
TIMETEC  
ACCESS APP



**MANAGE DEVICE**

- Page for admin to add/delete BLE 5 or FingerTec device
- To provide a listing to monitor device online/offline status



**MANAGE DOOR**

- Page for admin to pair BLE 5 or FingerTec device to each door
- Admin can manage door settings (only apply to BLE 5) for example door opening time, door alarm timer and etc.



**MANAGE ACCESS TIME**

- Admin can customise access time 24 hours in a day (in 30 minutes interval) and 7 days in a week to restrict user in-out time per door
- Admin can configure special access time for holiday



**MANAGE ACCESS GROUP**

- Admin can manage access permission for users per door at different access time by groupings
- When admin wants to change a person access permission, admin can assign the person into different grouping



**MANAGE TEMPORARY PASS**

- When the person is permitted to access certain doors at specific date and time, admin can create temporary access permission for the person
- Admin can activate the temporary pass at the specific date and time
- The access permission becomes invalid when it expires



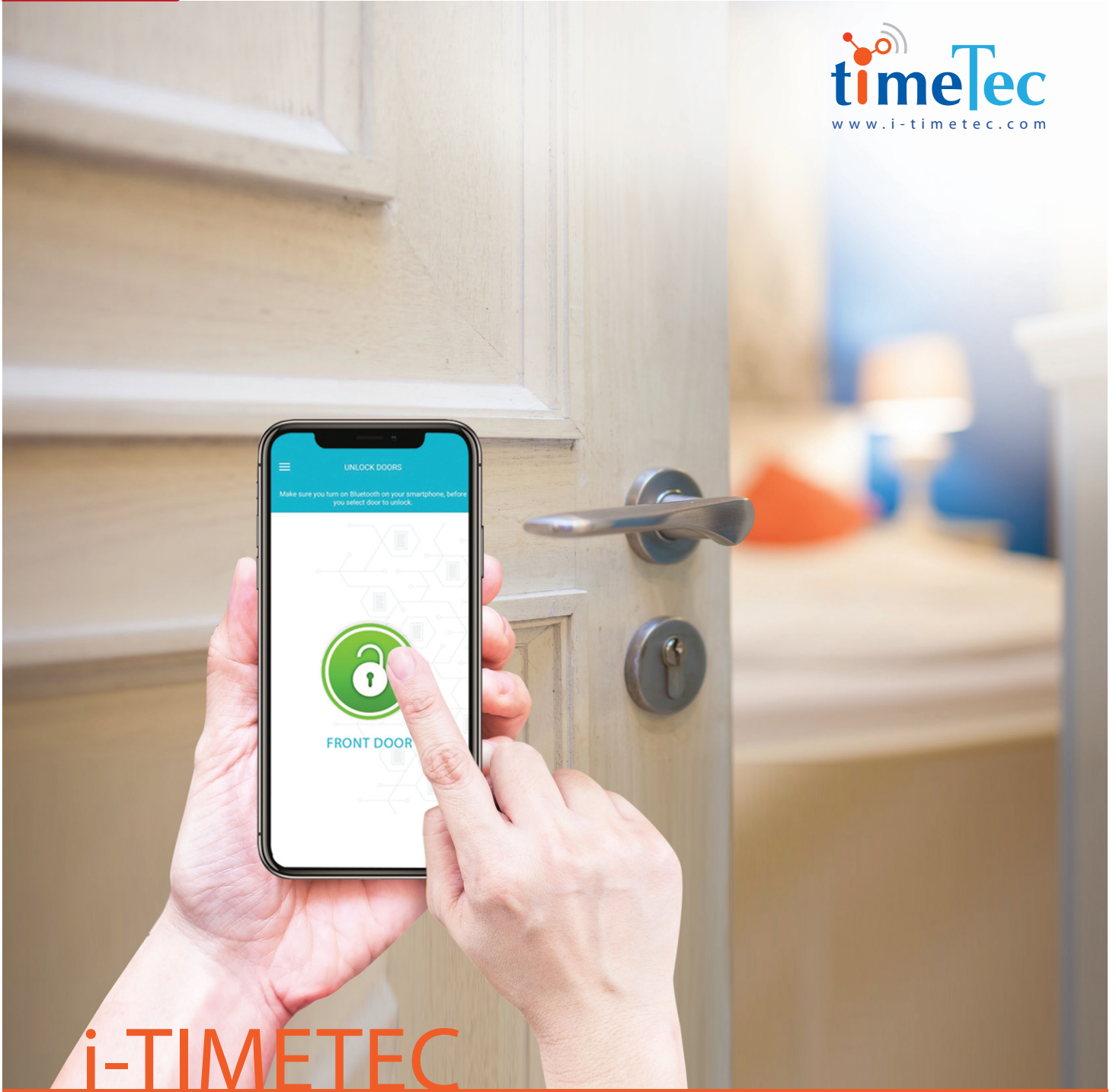
**MONITORING**

- Useful dashboard for security admin to keep an eye to all entrance and exit
- Full review of users in-out date/time at any doors in real-time
- Full review of abnormal door activities (door force opened, door not close and etc) in real-time



**REPORT**

- Admin can prepare total of 8 reports to discuss devices and door status, entry-exit records per persons or doors from Report module.
- Admin can save the reports into digital format i.e. PDF and send it to relevant person.



# i-TIMETEC

YOUR PHONE IS YOUR KEY

The most seamless door lock installation yet and take control of the access via your smartphone with i-TimeTec! The combination of TimeTec BLE-2 door access controller with i-TimeTec App provides you with the convenience of unlocking your doors via your smartphone using Bluetooth Low Energy (BLE), and get the door activities in real-time for convenience, transparency and extra security. i-TimeTec turns your smartphone into a smart key fast and affordably. The TimeTec BLE-2 can be easily installed without interrupting the aesthetics of your space and compromising the security aspect of your premises. And best of all, you are presented with many choices to unlock your doors. Voice, QR Code, Tap or Auto Unlock, pick your choice!



At any given time a user can only use one unlock option for each TimeTec BLE-2. A lock owner can configure a specific unlock option for each door, and this unlock option would apply to all users under the same door, and one door can only accept one type of unlocking option if a specific unlock option is chosen. The App will notify the users on the unlock option to use by displaying the unlocking method on your smartphone's screen such as the QR code icon for QR code scan, the pop-up message for voice command or a countdown timer for auto unlock.



An admin can assign an unlock option to a door, for example, a voice command, all users must adhere to it. When the admin selects Scan QR Code as an option, all users must use the Scan QR code to unlock the door. However, if an admin selects Voice Command or Auto Unlock, the users can choose to use either Voice Command or Auto Unlock or he/she can remain with Tap to Unlock option.



**DIFFERENT UNLOCKING OPTIONS VIA i-TIMETEC APP FOR TIMETEC BLE-2 SMART DOOR**



**BUTTON PRESS ON THE APP**

Tap on the App screen to open door



It has to be manually operated



Excellent unlock speed

Tap on the button method is the default unlocking method in i-TimeTec App. A user just needs to tap on the icon to gain access to a door and this method will not specify the in/out movement of the use.



**VOICE COMMAND**

Say the access keyword to the App i.e Open



Fast unlock speed



The smartphone must be unlocked with App running in the background.

Voice Command method lets users to choose the keyword to be said to the App before it could trigger the unlocking of the door. The user needs to remember the keyword to gain access and this method will not specify the in/out movement of the user. Configuration must be done in the setting page and the smartphone must be unlocked with App running in the background to use this method.



**AUTO-UNLOCKING**

- ✓ Convenience
- ✓ Doors unlock automatically when Bluetooth signal is detected
- ✓ Fast unlock speed
- ✓ The smartphone must be unlocked with App running in the background

Auto-Unlocking method can be chosen for users who prefer convenience, whereby they do not have to take out the smartphone from the pocket or the bag to open door. Configuration must be done in the setting page and the smartphone must be unlocked with App running in the background to use this method and this method will not specify the in/out movement of the user.



**SCAN QR CODE**

- ✓ Scan the QR Code assigned to gain access
- ✓ Manually operated
- ✓ User-friendly
- ✓ Fast unlock speed

Scan QR Code unlock method is important when movement monitoring is required by the lock's owner. By carrying two different QR codes, the codes can tell the movement's direction. When a person scans the QR code to unlock a door, his/her access record would be tagged with IN or OUT status. Hence, when the admin of the lock reviews the access records, the users' movements will be apparent.



**BLE-2**

- Communication : Bluetooth Low Energy (BLE) 4.2, Wiegand 26-bit input
- Bluetooth Encryption : 64-bit TimeTec Proprietary
- Channel : 3 FORM C Relay output, NO/NC selected via jumper Wiegand 26-bit input
- Size : 85 (L) x 96 (W) x 33 (H)
- Mobile OS : Android 4.0.2 and above, iOS 8.0 and above



**timeTec**  
PROFILE  
[www.timetecprofile.com](http://www.timetecprofile.com)

# TIMETEC PROFILE

KEEPING YOUR TEAM TOGETHER



TimeTec Profile is a platform that centralizes all your employee information in one system that is accessible from anywhere via the Internet. The solution ushers workforce management to the future by allowing companies to input all their staff's information into a cloud-based solution that is not only secure but also accessible with multi-level authorization.



● **CUSTOMISED** FIELD TO YOUR PROFILE

Every company is different, we get that. With TimeTec Profile, you can create new profile fields to cater to your company's needs.



● **SAFEGUARD** YOUR COMPANY'S CONFIDENTIAL MATTERS

With multi-level authorization, you can control the access and viewing rights of the system. Different access levels, different viewing rights.

● **MANAGE** OTHER SOLUTION LICENSES

TimeTec Profile is integrated with all TimeTec solutions namely: TimeTec TA, TimeTec Leave, TimeTec Patrol, TimeTec Hire and TimeTec Access Manage account activation and license information directly through TimeTec Profile.

● **ERRORS** MINIMIZED

When everybody has an access to his/her own record, the wrong information can be corrected instantly for a more accurate and updated staff profiles.

● **FEATURES**

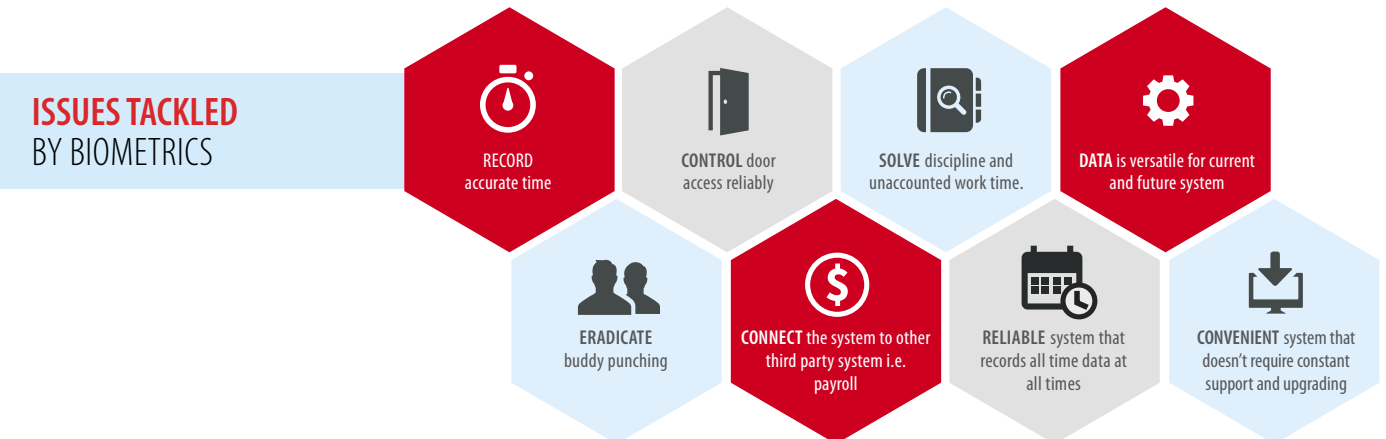
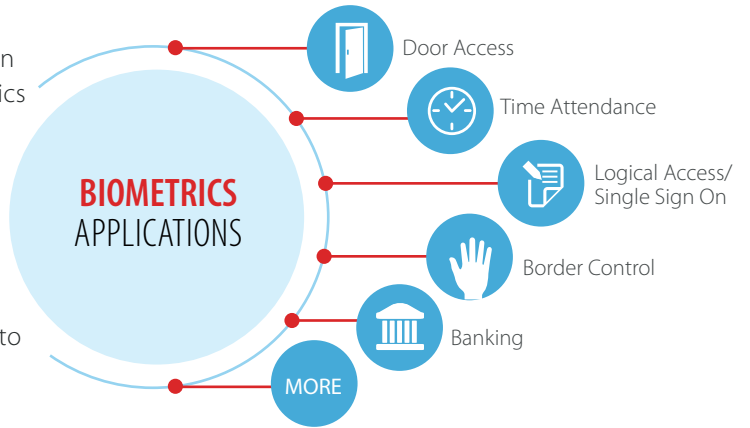


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# BIOMETRICS AT WORK

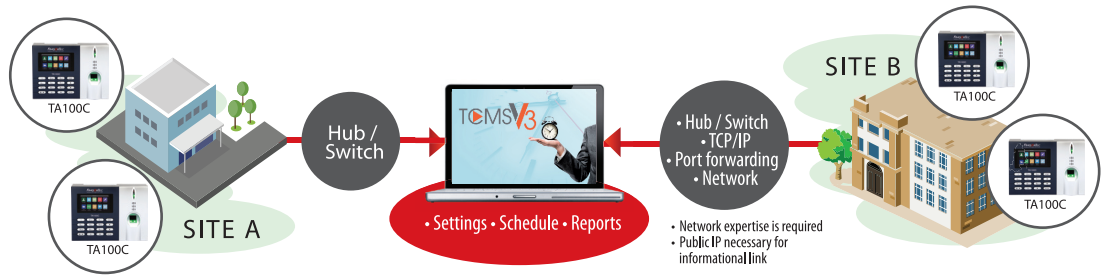
Biometrics have become a new norm in the office and in general, our lives. The verification technology of biometrics is amazingly accurate that consumers are not looking for a better option. From the most publicized fingerprint technology to the contactless face recognition technology and more, biometrics have continued to garner the market's confidence in various industries and markets. The uniqueness of biometrics and the advancement of computer power have made these technologies mature to provide utmost convenience to the consumers.





SYSTEM DIAGRAM

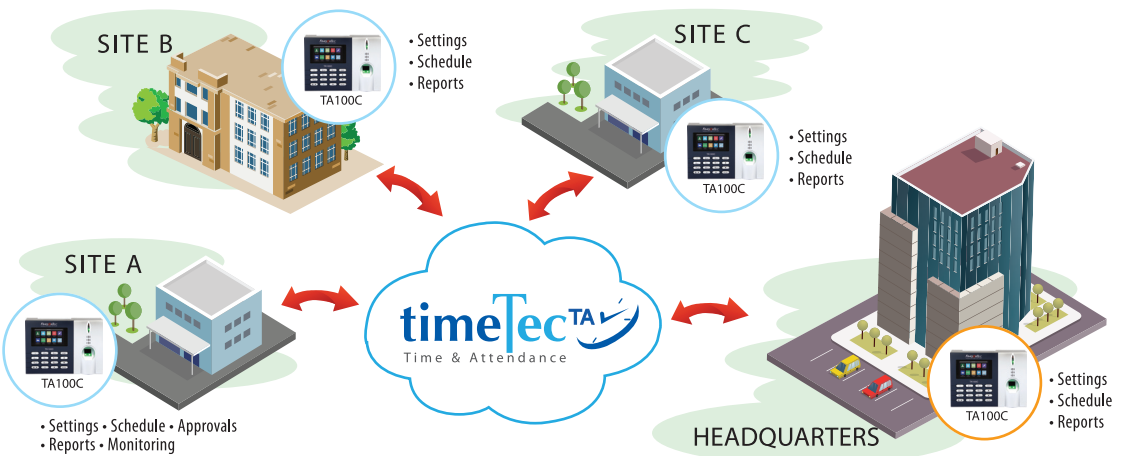
TIME ATTENDANCE WITH **WINDOWS** SOFTWARE



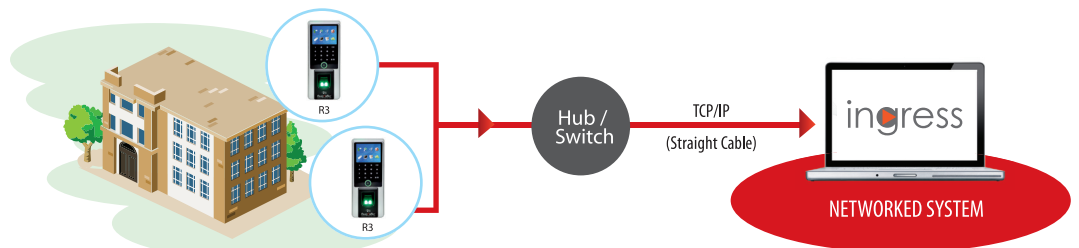
\*Optimized implantation: Maximum 25 devices/PC

TIME ATTENDANCE WITH **CLOUD** SOFTWARE

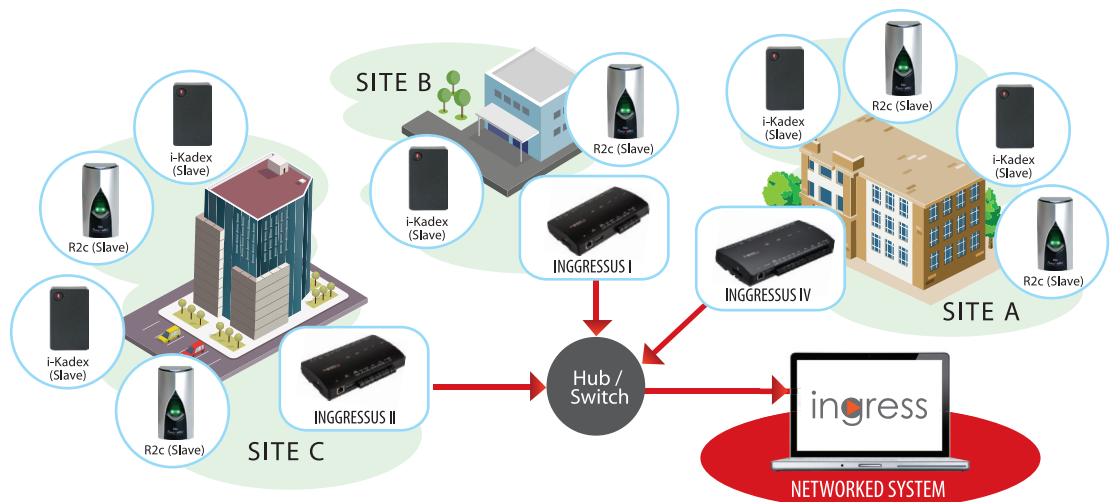
- Multi level access
- Single sign on
- App is available
- Biometrics data easily managed
- No limitation on number of readers



DOOR ACCESS WITH **WINDOWS** SOFTWARE



DOOR ACCESS WITH **INGRESSUS + WINDOWS** SOFTWARE





# FINGERTEC AROUND THE WORLD

FingerTec is an internationally renowned biometrics brand for time attendance and door access control for the past 18 years. Over the years, FingerTec installations have taken place all over the world in various industries to fulfill key objectives such as to achieve automation, to obtain workforce efficiency and to instill better discipline amongst employees. We have an array of customers, large and small, that have been using FingerTec solution and satisfied with the advantages it brings.

## AZP HOSPITAL IN SURINAME INSTALLED KADEX FOR WORKFORCE MANAGEMENT



AZP Hospital chooses Kadex and Ingress to record attendance of their staff using RFID card. The management at AZP's Human Resource Department was looking for a solution that can easily generate a detailed report pertaining to their employees' performance and the installation of FingerTec solution provided them the solution they were looking for.

## ZENITH BANK GHANA TAPS ON THE POWER OF BIOMETRICS WITH FINGERTEC



Zenith Bank Ghana Ltd. is currently utilizing over 40 units of FingerTec AC100C that has

been efficiently managing their workforce ever since. AC100C fingerprint system has the potential to minimize any attendance verification mistakes using minutiae point matching fingerprint technology to guarantee authenticity.

## LH PLUS SELECTS FINGERTEC FOR EFFICIENT WORKFORCE



LH Plus Sdn. Bhd. has been manufacturing bicycle stands since 1947, and over the last 70 years, LH Plus has proven to be a leading manufacturer of high quality, consumer safe plastic wares and products by not only meeting the exacting standards of their clients but often exceeds them. Choosing TA200 Plus and TA100C, these devices are loaded with useful features such as Clocking Schedules, Group Duty Roster, Report for LH Plus to fully utilized and reduced the workloads of their HR department.



## ABELA & CO ASSESSING ATTENDANCE WITH TA100C



Founded in 1967 within The United Arab Emirates, Abela & Co. has firmly established itself as one of the leading food service management company in the country and a pioneer of the industry in the region. Headquartered in Dubai, Abela has the privilege of serving over 120 prestigious local and international clients, across an array of industries, i.e. hospitality, education, construction and etc. Abela & Co. is now using FingerTec TA100C along with its bundled software and is very impressed with the capabilities of our sophisticated biometrics technologies in handling the sheer amount of staffs.

## FINGERTEC APPROVED FOR NEW HOI AN CITY



New Hoi An City is a future urban project by HB Group, one of the leading investment management companies in Vietnam. Stretching along the coast of An Bang, New Hoi An City consists of six functional districts carrying all infrastructure of a city. What's more, the city is built with environmental sustainability in mind thus enabling a more eco-friendly community to be established. OZO Condotel@New Hoi An City has deployed over 40 units of i-Kadex and Ingressus I along various entrances and exits of the building. Hence, visitors of the resort can definitely expect their safety as well as the safety of the environment to be aspects that are highly regarded.

## NABIL KEEPING EMPLOYEES IN CHECK



Since 1945, Al Nabil Company specializes in manufacturing a wide range of frozen & chilled

products with over 1000 highly experience employees focusing on producing and marketing the food products which are available in different styles of packaging, to cater to the retail and wholesale markets. With Face ID 2, employees of Nabil can clock their attendance accurately and by using this method, employees can maintain a hands-free approach to retain the hygiene factor, which is certainly a must for a food production company. Al Nabil Company has now installed FingerTec Face ID 2 within the company's HQ as well as various branches and is benefiting from contactless verification, greater productivity efficiency and tighter security all from one compact biometrics device.



## SADARA MANAGING STAFF ATTENDANCE WITH Q2i



Established in October 2011, Sadara Chemical Company is a joint venture developed by the Saudi Arabian Oil Company (Saudi Aramco) and The Dow Chemical Company (Dow). The name Sadara, an Arabic word meaning "in the lead" or "out in front", signifies the progressive leadership and superior performance that Sadara as a company stands for. FingerTec Q2i is a premium security device that utilizes the advanced biometric fingerprint technology as its verification method. As cards and tags are not appropriate for the kind of workplace Sadara operates in since it can easily be misplaced; Q2i on the other hand, provides construction workers with the convenience to clock in their attendance using only their fingerprints. Therefore, eliminating the costs of producing/replacing such cards and any instances of buddy punching as well as solving the setbacks of the punch card machine. What's more, Q2i has a supersized capacity storage of up to 10,000 fingerprint templates and 200,000 transaction logs thus making it the perfect solution to manage the scale of workers set forth by Sadara.

## SURAKARTA TIMING WITH FINGERTEC



The Government of Surakarta in Central Java has also decided to improve its operation flow in order to better serve its society and achieve its vision of becoming an independent, developed and prosperous city of culture. AC100C is FingerTec biometric Time & Attendance System which allows users to carry out clocking using one of the most convenient and secure access credentials: Fingerprint. This device holds an amazing capacity of 8000 fingerprint templates and 200000 transaction records plus it comes with the latest PUSH technology, suitable for FCC data storage and convenient for a cloud-based solution such as TimeTec TA.

## TOYOTA DRIVES EXCELLENCE WITH H2i



Toyota (Mauritius) Ltd. has continuously strived to contribute to the sustainable development of society through the provision of innovative and high quality products and services. H2i is FingerTec's latest door access and time attendance device. With a stylish design and a sleek layout, H2i is a master terminal able to hold up to 1,500 fingerprint templates as well as 10,000 card templates. The unique screen-less design uses a combination of voice commands and LED lights to communicate with its users. All in all, H2i proves that size, in fact, does not matter when it comes down to functions. Furthermore, H2i is designed to be environmental-friendly through its biometrics technology, which makes it ideal for an eco-conscious company like Toyota.



# TIMETEC STORMING THE RETAIL INDUSTRIES

Running a retail business is no walk in the park, no matter the scale of your operations. If you are a manager or owner in the retail industry, you know best that the challenges come from every corner. If managing retail stores is hard, imagine managing diverse and various employees in multiple stores. Moreover, the steady growth of e-commerce in recent years has brought profound changes and given rise to new rules of the game. Hence, it is crucial that retail businesses are able to recognize and arm their business with the right tools that can help monitor the staff effectively. With this in mind, two of the most influential retail companies in Malaysia have opt to utilize TimeTec Smart Solutions.

Firstly is JAKEL TRADING Sdn. Bhd., a company that began in January 1983 when the late Mohamed Jakel Bin Ahmad started his small retail business in Muar, Johor. The company was carrying JAKEL TRADING as a trademark in the textile industry to win over their customers. Right until the late 1990s, JAKEL TRADING became the major wholesaler and distributor of the textile industry in Malaysia. With the goal of "ONE BRANCH, ONE STATE", JAKEL TRADING has opened 20 branches throughout Malaysia. That number has thus been increasing ever since and with the recent opening of Wisma JAKEL in Shah Alam, comprising of 80,000 square feet; the branch was accorded as the Largest Textile Retail Outlet in the Malaysia Book of Records.

Looking at this magnitude, it is without doubt that a lot of resources have been placed onto the Management at JAKEL in order to handle its massive number of employees nationwide. However, that's all about to change as JAKEL is now adding TimeTec Smart Solutions (TimeTec TA & TimeTec Leave) into the mix. The company subscribes to TimeTec TA and TimeTec Leave in addition to deploying a number of FingerTec Biometric Solutions (AC100C, TA100C) to further promote automation as well as a more comprehensive management system



That said, the switch to cloud doesn't just end there as F J Benjamin, an industry leader in retail with a rich heritage dating back to 1959; has likewise chosen TimeTec TA as their go-to selection. Headquartered in Singapore and listed on the Singapore Exchange since November 1996, F J Benjamin has offices in three cities, manages over 20 iconic brands and operates 250 stores in addition to running two core businesses: Luxury/Lifestyle Fashion Retailing Distribution and Timepiece Distribution. As such, the company exclusively retails and distributes brands such as Guess, Marc Jacobs, Superdry, etc.

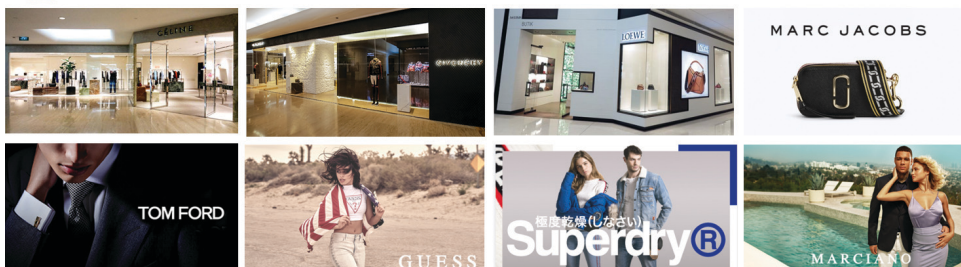
With TimeTec TA, all attendance management within F J Benjamin, be it local or international, can be summarized by our Smart Solution

Mobile Application. This is due to the fact that TimeTec TA App can be installed onto the smartphones. With just an Internet connection, employers can tackle any workforce issues by monitoring their staffs' attendances and easily rectify any disciplinary issues. That said, F J Benjamin (M) Sdn. Bhd. subscribed its employees in TimeTec TA together with TA100C.

Sooner or later, changes for the future are required and in order to get ready for the changes that come, retailers need to think of a way to automate processes to achieve better performance. TimeTec Smart Solutions are comprehensive tools that can assist retailers in managing their workforce. Look no further as our Smart Products are truly one of a kind.



## FJ BENJAMIN



# TIMETEC SETTING STANDARDS WITHIN MANUFACTURING SECTORS

Manufacturing has come a long way since its inception. Before that, it was always categorized as a sooty, gloomy and dangerous place; but today, it is all about innovation and implementing the latest technology. The manufacturing sectors have become so important to a point that they play a crucial role in contributing to a country's GDP.

In this modern era, the talk now is all about Industry 4.0, a name given to signal the trend of automation and data exchange in manufacturing technologies. That said, the aspect of automation shouldn't be applied solely for the production side as huge manufacturing companies often house a huge number of employees and this comes with issues pertaining to workforce management. In regards to this, two significant manufacturing companies in Malaysia: Yee Lee Trading Co. Sdn. Bhd. and Tamura Electronics (M) Sdn. Bhd. have decided to upgrade their workforce management to the Cloud.

To start of, Yee Lee Corporation Bhd group (YLC) began its core business as an edible oil repacker in Malaysia in 1968. Since then it has grown into a fully integrated manufacturer and distributor. YLC group of companies are involved in various sectors such as manufacturing, marketing/distribution of fast moving consumer products and etc. Today, YLC has an established marketing and distribution network as well as listed on the Main Market of Bursa Malaysia Securities Berhad. With a total employee strength of 2000, Yee Lee needed a solution that is fully scalable and this brings us to TimeTec TA.

In order to reduce cases where employees contribute to low productivity and absenteeism due to working schedules, it is best to monitor their attendances and when they clock in and out of their scheduled periods. Hence, having an effective software and centralized online solution such as TimeTec TA is imperative to tackle these issues. Through TimeTec TA, there are three options available to collect time data from employees, i.e. Biometrics Devices, Mobile App or PC Clocking. It is this level of flexibility that allows TimeTec Solutions to be applicable in Yee Lee's operation. As such, Yee Lee is subscribed to TimeTec TA plus a bunch of TA100C for maximum performance.

## GET THINGS DONE WITH TIMETEC TA



Versatile Clocking Methods: Biometrics, Mobile App, Web

- Biometrics (face and/or fingerprint) - Sold separately
- Mobile App (GPS, NFC, Wifi, Beacon clocking) - included without extra charge



Scheduling and shift made easy, for multiple branches and variety of work hours



Overtime approval fast and immediate



Staff contact from the App



Monitoring of staff from App



Real-time data



View and print reports anytime, from anywhere

That's not all as Tamura Malaysia has likewise join the implementation by including TimeTec Leave as well. Tamura Corporation, the headquarters of the Group in Japan, has come a long way since its inception in 1924. As of now, Tamura Malaysia has achieved remarkable growth and is now a leading manufacturer and exporter in the ASEAN region for ferrite and power transformers, switching transformer and more.

Similar in concept but with different execution, TimeTec Leave is a solution that handles the leave management aspect online. Why this is important for manufacturing companies such as Tamura is because, unscheduled leaves can be a bane to a company's business. Employees would call in

sick or take time off from work and leave little to zero notice for their employers. This will result in low productivity/morale in the workplace and this situation is definitely a no-no for manufacturing sectors. That said, Tamura Malaysia is subscribed to both TimeTec TA and TimeTec Leave to help keep its workforce in check.

With more companies turning to cloud computing in work related matters to secure their data and access them whenever/wherever they like, the step towards Industry 4.0 is most certainly in the horizon as TimeTec Solutions is designed to reduce administrative overheads by automating everything for the Human Resource Department.



# i-NEIGHBOUR GAINS MAJOR LOCAL SUPPORT

In 2018, two of Malaysia's largest Property Developers, i.e. IOI Properties Group Berhad and Putrajaya Holdings, have made the decision to incorporate i-Neighbour via our White Label Program to better offer their communities with a Smart Lifestyle. This establishment soon brought about two online platforms known as IOI Community and i-PjH respectively, which are powered by our Smart Community System: i-Neighbour.



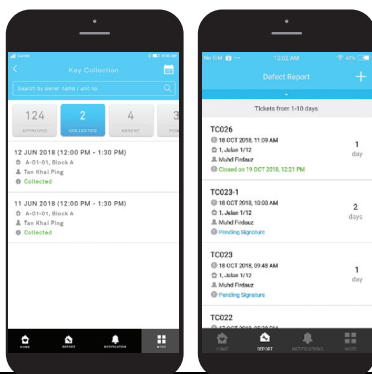
IOI Properties Group Berhad ("IOIPG") is one of Malaysia's leading public-listed property developers. It has built a solid reputation as the esteemed property arm of IOI Group prior to its successful listing onto the Main Board of Malaysian Stock Exchange on 15 January 2014. Today, IOIPG is a renowned Property Company in the country with a proven track record spanning more than three decades within the property development industry with principal activities including property development, property investment, leisure and hospitality.

With the introduction of their latest mobile engagement solution: IOI Community, IOIPG can focus on fostering sustainable community relations and creating an environment that is conducive for working, playing and living within its development. As stated by Lee Yoke Har, IOIPG Executive Director, "Our ultimate aim is to provide convenience, speedier and more personalised communication, and service delivery platform that will meet the energetic lifestyle of the urban community". Through IOI Community App, residents can have access to features such as e-billing, facilities booking, defect reporting, announcements and many more, all right from their smartphone.



Putrajaya Holdings on the other hand, is the Master Developer of Putrajaya, and its illustrious journey has been paved with extraordinary milestones culminating in the award-winning city of Putrajaya since its inception. The company was incorporated on October 19, 1995 with the initial responsibility of designing and developing the comprehensive, highly strategic 20-year Putrajaya Masterplan. Presently, with more than 20 signature development projects in Putrajaya comprising of office buildings, commercial hubs and residences, Putrajaya Holdings is a maestro in the property market working alongside renowned names in the construction industry.

By implementing i-PjH, Putrajaya Holdings can thus offer a much more effective communication between the residents and managements by utilizing features like the Key Collection and Defect Report module. As mentioned by Hassan Ramadi, Putrajaya Head of Development, "The application is good for our customers depending on how good we use the tools and hopefully everybody will use this tool to facilitate all customers and also ourselves in monitoring defects and providing better services as well as satisfaction to our customers".



All in all, these installations are made possible by i-Neighbour through our White Label Program. The program is especially ideal for housing developers and smart city developers with customers now being able to rebrand, resell and add value to their housing projects. To top it off, i-Neighbour is a product that is entirely made in Malaysia by Malaysians and it's great to see that our product is being supported by Malaysia's Leading Property Developers.





# TIMETEC

## THE PROMINENCE OF DATA SECURITY



With so much data involved, data privacy and security is becoming one of the main concerns, especially when the government is excluded from the Data Protection Act. Some even questioned should the private companies be allowed to manage and operate the Smart Nation Platform, and which set of data privacy laws should they abide by?

It is known that sensor networks and perpetual data flows produce new service models and analytics to make modern cities and smart communities more livable, sustainable, and equitable, but at the same time, connected smart solutions raise concerns about individuals' privacy, autonomy, and freedom of choice, as well as potential discrimination by institutions or governments.



To be fully participative in the social data revolution, users must shed the old mindset of passive “consumers”, who take in whatever is placed before us, and embrace a new mindset, that of active co-creator of the data. The balance of power is shifting between government and people, buyers and sellers, employers and employees, then only the data of the people can and will become data for the people.

When a business upgraded itself to a so-called smart status loaded with all the smart systems, devices and sensors, the flow and generation of data would increase tremendously. In the past, the data might be kept on the local computer or server, and can only be accessed by a few administrators. Hence, even if you are the transactions owner, for example, if you need the hard copy of your up-to-date service charges, you have to go to the HR Department and demand for the account executive to access your own account as well as ask him/her to print it for you. What is the impact for the employers and employees as a whole with all the data floating on the cloud?

As an individual, your personal data such as name, ID, contact information, home address, service account status and etc., most probably will be captured and stored locally in the past but shifted to cloud in the smart era. Your physical interactions with smart devices leave traces too. This set of access transaction data produces the time in/out data when you drive through the barrier gate, access office premises, and attendance clocking when starting work in addition to taking the lift, or any other thresholds or doors that are possible using smart devices. And with the availability of Internet and cloud computing, it can even generate real-time data as well.

How do we perceive to have all of these generated data to adhere to our daily activities? In the business world, can we still live as a recluse in addition to segregating ourselves from technological development? If the answer is no, we have to deal with the data maturely instead of rejecting the trend that will inevitably come by.

As such, the selection of vendor becomes the most crucial task because companies awarded with the project is at the forefront of installing the system that deals with the abundance of data generated while in daily operation, the backend to house the data, and the knowledge on how to secure the data during transmission. That said, at TimeTec, the idea of losing one’s

personal information is not something that we take lightly of and therefore, we are willing to go to great length for it. Below are some of the crucial steps that TimeTec has taken to treat your data security accordingly:

1



## TIMETEC IS ISO 27001 CERTIFIED

ISO 27001 is a security management standard that specifies security management best practices and comprehensive security controls following the ISO 27001 best practice guidance. The basis of this certification is the development and implementation of a rigorous security program, which includes the development and implementation of an Information Security Management System (ISMS) that defines how the company perpetually manages security in a holistic, comprehensive manner. In regards to that, TimeTec has successfully received the ISO certification on the 8th of March 2018.

2



## TIMETEC CARRIES OUT THIRD PARTY PENETRATION TEST YEARLY

A penetration test or pen test, is an attempt to evaluate the security of an IT infrastructure by safely trying to exploit vulnerabilities. These vulnerabilities may exist in operating systems, services, application flaws, improper configurations or risky end-user behaviours. Such assessments are also useful in validating the efficacy of defensive mechanisms as well as end-user adherence to security policies. Hence, all of TimeTec Smart Solutions (TimeTec TA, TimeTec Leave, TimeTec Patrol and etc) undergo this procedure to fully ensure that the defences provided by our products were sufficient.

3



## TIMETEC IMPLEMENTS TWO-FACTOR AUTHENTICATION

Two-factor authentication is a security feature that protects your system account in the event that your password is compromised. Two-factor authentication adds extra security because it requires users to access the system via a unique authentication code from an approved authentication device. Striving to provide our users peace of mind, we work with renowned third party provider - Google Authenticator to enhance the security level of your TimeTec account.

4



## TIMETEC HOSTS OUR SMART SOLUTIONS SERVICE IN TRUSTED CLOUD SERVER

TimeTec runs on the Amazon EC2 which offers a highly reliable environment where replacement instances can be rapidly and predictably commissioned. The Amazon EC2 Service Level Agreement commitment is 99.95% availability for each Amazon EC2 Region. Data is backed up regularly and has Multi-AZ deployments which protect your latest database updates against unplanned outages. All our infrastructure is monitored live, continuously (24/7/365) by Amazon CloudWatch to identify and prevent potential problems from occurring.

5



## TIMETEC GDPR COMPLIANCE

On 25 May 2018, the General Data Protection Regulation (GDPR), a new data protection law for European countries started to take effect. GDPR is meant to strengthen the protection of personal data, it is a wide-reaching legislation, as it applies to all companies handling personal data of EU residents and its scope also covers almost all data relating to an individual, such as IP addresses, website cookies and more. For TimeTec, these new provisions will now govern the way we collect, store and process your personal data. In order to comply with the GDPR’s requirements, TimeTec has also made a host of changes to our websites, policies, systems as well as processes.







The Future is now and Cloud is the way. TimeTec is a company that aims to surpass the market expectations in both the Workforce and Security Industries. We progress leaps and bounds by tapping on the readily available technology to improve upon our sophisticated products in addition to building better solutions for our valuable customers. Sooner or later, technology disruption will arrive to disrupt all industries; why not reinvent as well as add value to your businesses today by selecting our vast array of Smart Products.

# ACCESS CONTROL & TIME ATTENDANCE MODEL



SPECIFICATIONS		FINGERPRINT					
MODEL	AC900	R2	R3	R2c (Slave)	R3c (Slave)	H2i	Q2i
<b>SURFACE FINISHING</b>	Acrylonitrile Butadiene Styrene (ABS)	Acrylonitrile Butadiene Styrene (ABS)	In-mould labelling (IML), poly carbonate (PC) & (ABS)	Acrylonitrile Butadiene Styrene (ABS)	Acrylonitrile Butadiene Styrene (ABS), IP65	Acrylonitrile Butadiene Styrene (ABS)	Acrylonitrile Butadiene Styrene (ABS)
<b>TYPE OF SCANNER</b>	Non coated optical scanner	Non coated optical scanner	Non coated optical scanner	Non coated optical scanner	Non coated optical scanner	Non coated optical scanner	Non coated optical scanner
<b>MICROPROCESSOR</b>	400 MHz	400 MHz	400 MHz	Managed by master	1.0 GHz	300 MHz	800 MHz
<b>MEMORY</b>	128 MB flash memory & 32 MB SDRAM	128 MB flash memory & 32 MB SDRAM	256 MB flash memory & 32 MB SDRAM	Managed by master	Managed by master	256 MB flash memory & 32 MB SDRAM	256 MB flash memory & 64 MB SDRAM
<b>ALGORITHM</b>	BioBridge VX 9.0 / 10.0	BioBridge VX 9.0 / 10.0	BioBridge VX 10.0	BioBridge VX 10.0	BioBridge VX 10.0	BioBridge VX 9.0 / 10.0	BioBridge VX 9.0 / 10.0
<b>PUSH TECHNOLOGY</b>	Yes	Yes	Yes	X	X	X	Yes
<b>DIMENSION (L X W X H), mm</b>	91 x 40 x 190	94 x 50 x 189	78 x 32 x 190	64 x 42 x 135	77 x 38 x 121	78 x 50 x 150	200 x 56 x 160
<b>STORAGE</b>							
Templates	FP: 3,000	FP: 3,000	FP: 3,000	Storage in master terminal	Storage in master terminal	FP: 1,500	FP: 10,000
Transactions	120,000	120,000	100,000			100,000	200,000
<b>ENROLLMENT &amp; VERIFICATION</b>							
Methods	Fingerprint (1:1, 1:N) & password	Fingerprint (1:1, 1:N) card & password	Fingerprint (1:1, 1:N) card & password	Fingerprint (1:N) & card	Fingerprint (1:N) & card	Fingerprint (1:N) & card	Fingerprint (1:1, 1:N) card & password
Recommended fingerprint per user ID	2	2	2	Managed by master	Managed by master	2	2
Fingerprint placement	Any angle	Any angle	Any angle	Any angle	Any angle	Any angle	Any angle
Card reading distance, mm	X	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)
Verification time (sec)	< 1	< 1	< 1	Managed by master	Managed by master	< 1	< 1
FAR (%)	< 0.0001	< 0.0001	< 0.0001			< 0.0001	< 0.0001
FRR (%)	< 1	< 1	< 1			< 1	< 1
<b>CARD TECHNOLOGY</b>							
RFID: 64-bit, 125kHz	X	Yes	Yes	Yes	Yes	Yes	Yes
MIFARE: MFIS50/S70, 13.56MHz	X	Made to order	Made to order	Made to order	Made to order	Made to order	Made to order
HID: HID 1325, 26-bit, 125kHz	X	Made to order	X	X	X	Made to order	Made to order
<b>COMMUNICATIONS</b>							
Method	TCP/IP, RS232, RS485	TCP/IP, RS232, RS485, USB disk	TCP/IP, RS232, RS485, USB disk	RS485	RS485	TCP/IP, RS232, RS485, USB disk	TCP/IP, RS232, RS485, USB disk (Optional WiFi & 3G)
Baud rates	9600 ~ 115200	9600 ~ 115200	9600 ~ 115200	X	X	9600 ~ 115200	9600 ~ 115200
Wiegand	26-bit output	26-bit input/output	26-bit input/output	X	X	26-bit input/output	26-bit input/output
<b>OPERATING ENVIRONMENT</b>							
Temperature (°C)	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45
Humidity (%)	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80
Power input	DC 12V 3A	DC 12V 3A	DC 12V 3A	Managed by Master	DC 12V 3A	DC 12V 3A	DC 12V 3A
<b>TIME ATTENDANCE</b>							
Siren	X	X	X	X	X	X	Built-in (Optional external)
Work codes	Yes	Yes	Yes	X	X	X	Yes
Fast transaction checking	X	X	X	X	X	X	X
<b>MULTIMEDIA</b>							
Voice	X	Yes	Yes	X	X	Yes	Yes
Display	Black and white	Black and white	2.4" 3k color LCD	X	X	X	3.5" 65k color TFT screen
Photo ID	X	X	Yes	X	X	X	Yes
Short messaging	X	Yes	Yes	X	X	X	Yes
Day Light Saving Timer	X	X	X	X	X	X	X
Internal backup battery	X	X	X	X	X	X	X
<b>ACCESS CONTROL</b>							
EM Lock driving output	DC 12V 3A / relay output	DC 12V 3A / relay output	DC 12V 3A / relay output	Managed by master	Managed by master	DC 12V 3A / relay output	DC 12V 3A / relay output
Alarm output	NO/NC	NO/NC	NO/NC			NO/NC	NO/NC
Anti passback	X	Yes	Yes			Yes	Yes



FACE & FINGERPRINT		FACE		CARD			
Face ID 2 (FMM)	Face ID X	Face ID 3	Face ID 4D	Kadex	m-Kadex	i-Kadex (Slave)	k-Kadex (Slave)
Acrylonitrile Butadiene Styrene (ABS) & acrylic	Acrylonitrile Butadiene Styrene (ABS) & acrylic	Acrylonitrile Butadiene Styrene (ABS) & acrylic	Acrylonitrile Butadiene Styrene (ABS)/ polycarbonate blend	Acrylonitrile Butadiene Styrene (ABS)	Polycarbonate	Polycarbonate	Acrylonitrile Butadiene Styrene (ABS)
Hi-res infrared camera & fingerprint scanner	Hi-res infrared camera & fingerprint scanner	High resolution infrared camera	High resolution infrared camera	X	X	X	X
1.2 GHz Single Core CPU	1.2 GHz Single Core CPU	800 MHz	800 MHz	400 MHz	400 MHz	Managed by master	Managed by master
128MB Nand flash & 64MB Nand flash	1.0GB SDRAM/ 1.0GB flash	256 MB flash memory & 128 MB SDRAM	256 MB flash memory & 128 MB SDRAM	8 MB flash memory & 32 MB SDRAM	4 MB flash memory & 32 MB SDRAM	Managed by master	Managed by master
Face BioBridge VX 8.0, FP BioBridge VX 9.0/ 10.0	Face BioBridge VX 8.0, FP BioBridge VX 9.0/ 10.0	Face BioBridge VX 8.0	Face BioBridge VX 8.0	X	X	X	X
Yes	Yes	Yes	Yes	Yes	X	Managed by master	Managed by master
194 x 110 x 145	194 x 110 x 145	86 x 62 x 218	148 x 148 x 122	92 x 49 x 137	92 x 29 x 134	55 x 15 x 100	75 x 20 x 115
FP: 10,000 Face: 1,200 Card: 10,000	FP: 10,000 Face: 3000 (1:N), 30000(1:1) Card: 10,000	Face: 1,500 Card: 10,000	Face: 800 Card: 10,000	Card: 30,000	Card: 30,000	Storage in master terminal	Storage in master terminal
200,000	1,000,000	100,000	100,000	50,000	50,000		
Face (1:1, 1:N), fingerprint (1:1, 1:N), card & password	Face (1:1, 1:N), fingerprint (1:1, 1:N), card & password	Face (1:1, 1:N), card & password	Face (1:1, 1:N), card & password	Card & password	Card	Card	Card & password
2	2	X	X	X	X	Managed by master	Managed by master
Any angle	Any angle	X	X	X	X	X	X
40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)
FP: <1, Face: <2	FP: <1, Face: <2	Face: < 2	Face: < 2	< 1	< 1	Managed by master	Managed by master
FP: <0.0001, Face: <0.01	FP: <0.0001, Face: <0.01	Face: < 0.01	Face: < 0.01	X	X	X	X
FP: <0.1, Face: <0.1	FP: <0.1, Face: <0.1	Face: < 0.1	Face: < 0.1	X	X	X	X
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Made to order	Made to order	Made to order	Made to order	Made to order	Made to order	Made to order	Made to order
Made to order	Made to order	Made to order	X	Made to order	Made to order	X	X
TCP/IP, RS232, RS485, USB disk (Optional WiFi & 3G)	TCP/IP, RS232, RS485, USB disk (Optional WiFi & 3G)	TCP/IP, RS232, RS485, USB disk (Optional WiFi)	TCP/IP, USB disk, USB client (Optional WiFi)	TCP/IP, RS232, RS485, USB disk	TCP/IP, RS232, RS485, USB disk	Wiegand	Wiegand
9600 ~ 115200	9600 ~ 115200	9600 ~ 115200	9600 ~ 115200	9600 ~ 115200	9600 ~ 115200	X	X
26-bit input/output	26-bit input/output	26-bit input/output	X	26-bit input/output	26-bit input/output	26-bit output	26-bit output
0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45	-10 ~ 70	-10 ~ 70
20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80
DC 12V 3A	DC 12V 3A	DC 12V 3A	DC 12V 3A	DC 12V 2A	DC 12V 2A	DC 12V 1A	DC 12V 1A
Built-in (Optional external)	Built-in and external	Built-in (Optional external)	Built-in (Optional external)	X	X	X	X
Yes	Yes	Yes	Yes	Yes	X	X	X
Yes	Yes	Yes	Yes	X	X	X	X
Yes	Yes	Yes	Yes	Yes	X	X	X
4.3" 65k color TFT touch screen panel	4.3" 65k color TFT touch screen panel	3.0" 65k color TFT touch screen panel	3.0" 65k color TFT touch screen panel	Black and white	X	X	X
Yes	Yes	Yes	Yes	X	X	X	X
Yes	Yes	X	Yes	Yes	X	X	X
Yes	Yes	Yes	Yes	X	X	X	X
Yes (DC12V, 2000m Ah)	Yes (DC12V, 2000m Ah)	X	X	X	X	X	X
DC 12V 3A / relay output	DC 12V 3A / relay output	DC 12V 3A / relay output	DC 12V 3A / relay output	DC 12V 3A / relay output	DC 12V 3A / relay output	Managed by master	Managed by master
NO/NC	NO/NC	NO/NC	NO/NC	NO/NC	NO/NC		
Yes	X	X	X	Yes	Yes		



SPECIFICATIONS	FINGERPRINT					FACE	CARD
MODEL	TA500	TA700W	AC100C	TA100C	TA200 Plus	Face ID 4	TimeLine 100
<b>SURFACE FINISHING</b>	Acrylonitrile Butadiene Styrene (ABS) & Polycarbonate (PC)	Acrylonitrile Butadiene Styrene (ABS) & Polycarbonate (PC)	Acrylonitrile Butadiene Styrene (ABS)	Acrylonitrile Butadiene Styrene (ABS)	Acrylonitrile Butadiene Styrene (ABS)	Acrylonitrile Butadiene Styrene (ABS)/ Polycarbonate blend	Acrylonitrile Butadiene Styrene (ABS)
<b>TYPE OF SCANNER</b>	Non coated optical scanner	Non coated optical scanner	Non coated optical scanner	Non coated optical scanner	Non coated optical scanner	High resolution infrared camera	X
<b>MICROPROCESSOR</b>	360 MHz	180 MHz	800 MHz	800 MHz	800 MHz	800 MHz	400 MHz
<b>MEMORY</b>	128 MB flash memory & 16 MB SDRAM	8 MB flash memory & 16 MB SDRAM	256 MB flash memory & 128 MB SDRAM	256 MB flash memory & 128 MB SDRAM	256 MB flash memory & 32 MB SDRAM	256 MB flash memory & 128 MB SDRAM	8 MB flash memory & 32 MB SDRAM
<b>ALGORITHM</b>	BioBridge VX 10.0	BioBridge VX 10.0	BioBridge VX 9.0 / VX 10.0	BioBridge VX 9.0 / VX 10.0	BioBridge VX 9.0 / VX 10.0	Face BioBridge VX 8.0	X
<b>PUSH TECHNOLOGY</b>	X	Yes	Yes	Yes	Yes	Yes	Yes
<b>DIMENSION (L X W X H), mm</b>	184 x 38 x 134	165 x 14 x 122	195 x 48 x 144	190 x 52 x 140	200 x 56 x 160	148 x 148 x 122	190 x 50 x 140
<b>STORAGE</b>							
Templates	Fingerprint 2,000	Fingerprint 1,000	Fingerprint 8,000	Fingerprint 8,000	Fingerprint 10,000	Face: 800 Card: 10,000	Card: 10,000
Transactions	80,000	50,000	200,000	200,000	200,000	100,000	30,000
<b>ENROLLMENT &amp; VERIFICATION</b>							
Methods	Fingerprint (1:1, 1:N) & password (Optional RFID Card)	Fingerprint (1:1, 1:N) & password	Fingerprint (1:1, 1:N) & password	Fingerprint (1:1, 1:N) & password (Optional RFID Card)	Fingerprint (1:1, 1:N) card & password	Face (1:1, 1:N), card & password	Card & password
Recommended fingerprint per user ID	2 (Max 1000 User ID)	2 (Max 500 User ID)	2	2	2	X	X
Fingerprint placement	Any angle	Any angle	Any angle	Any angle	Any angle	X	X
Card reading distance, mm	40 ~ 80 (RFID), 30 ~ 50 (Mifare)	X	X	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)
Verification time (sec)	< 1	< 1	< 1	< 1	< 1	Face: < 2	< 1
FAR (%)	< 0.0001	< 0.01	< 0.0001	< 0.0001	< 0.0001	Face: < 0.01	X
FRR (%)	< 1	< 0.1	< 1	< 1	< 1	Face: < 0.1	X
<b>CARD TECHNOLOGY</b>							
RFID: 64-bit, 125kHz	Made to order	X	X	Yes (TA100C-R only)	Yes	Yes	Yes
MIFARE: MF1S50/S70, 13.56MHz	Made to order	X	X	Made to order (MF only)	Made to order	Made to order	Made to order
HID: HID 1325, 26-bit, 125kHz	X	X	X	Made to order (HID only)	Made to order	X	Made to order
<b>COMMUNICATIONS</b>							
Method	TCP/IP, USB disk	WiFi, USB	TCP/IP, USB disk (Optional RS232 & RS485)	TCP/IP, USB disk (Optional RS232, RS485, WiFi & GPRS)	TCP/IP, USB disk (Optional RS232, RS485, POE & WiFi, 3G only applicable to non-POE devices)	TCP/IP, USB disk, USB client (Optional WiFi)	TCP/IP, USB disk (Optional RS232 & RS485)
Baud rates	X	X	9600 ~ 115200	9600 ~ 115200	9600 ~ 115200	9600 ~ 115200	9600 ~ 115200
Wiegand	X	X	X	X	X	X	X
<b>OPERATING ENVIRONMENT</b>							
Temperature (°C)	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45
Humidity (%)	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80
Power input	DC 12V 1.5A	DC 5V 0.8A	DC 5V 2A	DC 5V 2A	DC 12V 3A, DC 5V 2A (POE)	DC 12V 3A	DC 5V 2A
<b>TIME ATTENDANCE</b>							
Siren	Yes	X	X	Built-in and external	Built-in (Optional external)	Built-in	Built-in and external
Work codes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fast Transaction Checking	X	X	X	X	X	Yes	X
<b>MULTIMEDIA</b>							
Voice	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Display	2.8" 3k color TFT screen	2.8" 65k color TFT screen	3.0" 65k color TFT screen	3.0" 65k color TFT screen	3.5" 65k color TFT screen	3.0" 65k color TFT touch screen panel	Black and white
Photo ID	X	X	Yes	Yes	Yes	Yes	X
Short Messaging	X	X	Yes	Yes	Yes	Yes	Yes
Day Light Saving Timer	X	X	X	X	X	Yes	X
Internal Backup Battery	Yes (2 hours working, 4 hours standby)	X	X	X	X	X	X

# CONTROLLER, QR READER & IOT



SPECIFICATIONS	CONTROLLER			QR READER	IOT			
MODEL	INGRESSUS I	INGRESSUS II	INGRESSUS IV	QR110 (Slave)	BLE-2	BLE-3	BLE-5	BLE-16
<b>MICROPROCESSOR</b>	ACPU 32-bit, 400 MHz	CPU 32-bit, 400 MHz	CPU 32-bit, 400 MHz	Managed by Ingressus/terminal	ARM CORTEX-M0 32-bit RISC 48MHz	ARM CORTEX-M0 32-bit RISC 48MHz	ARM CORTEX-M4 32-bit RISC 100 MHz	ARM CORTEX-M0 32-bit RISC 48MHz
<b>MEMORY</b>	128MB flash memory & 32 MB SDRAM	128MB flash memory & 32 MB SDRAM	128MB flash memory & 32 MB SDRAM	X	64KB flash memory & 16KB SRAM	64KB flash memory & 16KB SRAM	1.5 MB flash memory & 320 KB SRAM	64KB flash memory & 16KB SRAM
<b>POLARITY PROTECTION</b>	Yes	Yes	Yes	X	Yes	Yes	Yes	Yes
<b>DIMENSION (L X W X H), mm</b>	186 x 106 x 36	186 x 106 x 36	226 x 106 x 36	86 x 4 x 86	85 x 96 x 33	85 x 96 x 33	85 x 96 x 33	180 x 231 x 62
<b>STORAGE</b>								
Templates	Fingerprint: 3,000 Card: 30,000 Password: 30,000	Fingerprint: 3,000 Card: 30,000 Password: 30,000	Fingerprint: 3,000 Card: 30,000 Password: 30,000	Managed by Ingressus/terminal	Card: 1,000	X	X	X
Users	X	X	X	Managed by Ingressus/terminal	Unlimited, stored in cloud server	Unlimited, stored in cloud server	Unlimited, stored in cloud server	Unlimited, stored in cloud server
Transactions	100,000	100,000	100,000		Unlimited, stored in cloud server	Unlimited, stored in cloud server	Unlimited, stored in cloud server	Unlimited, stored in cloud server, local 1,000 transactions
<b>VERIFICATION</b>								
Method	Wiegand terminal	Wiegand terminal	Wiegand terminal	QR Code RFID EM Card 125KHz MiFare Card 13.56 MHz (Made to order)	Mobile App & Card (RFID 64-bit 125kHz)	Mobile App	Mobile App	Mobile App
Reading Distance	X	X	X	QR Code: 3~10cm Card: 2~3cm	RFID: 40 ~ 80 mm Mobile App: < 5m	Mobile App: < 5m	Mobile App: < 5m	Mobile App: < 5m
<b>COMMUNICATION</b>								
Method	TCP/IP, RS485 (communication to server)	TCP/IP, RS485 (communication to server)	TCP/IP, RS485 (communication to server)	Wiegand, RS485	WiFi (AWS IoT connection), Bluetooth Low Energy (BLE) 4.2	WiFi (AWS IoT connection), Bluetooth Low Energy (BLE) 4.2	WiFi (AWS IoT connection), Bluetooth Low Energy (BLE) 4.2	WiFi (AWS IoT connection), Dual BLE 4.0 & 4.2
Smartphone	X	X	X	X	Android 4.0.2 and above, iOS 8.0 and above	Android 4.0.2 and above, iOS 8.0 and above	Android 4.4.2 and above, iOS 8.0 and above	Android 4.0.2 and above, iOS 8.0 and above
Max terminal	2	4	4	X	X	X	X	X
Wiegand	2 x 26-bit Wiegand input. Each for 1 slave terminal (1 x RS485 input to support RS485 network) (max 2 units)	4 x 26-bit Wiegand input. Each for 1 slave terminal (1 x RS485 input to support RS485 network) (max 4 units)	4 x 26-bit Wiegand input. Each for 1 slave terminal (1 x RS485 input to support RS485 network) (max 8 units)	Wiegand 26/34 output	Wiegand 26-bit input	X	X	X
<b>OPERATING ENVIRONMENT</b>								
Temperature (°C)	0 ~ 55	0 ~ 55	0 ~ 55	-10 ~ 70	0 ~ 45	0 ~ 45	0 ~ 55	20 ~ 80
Humidity (%)	10 ~ 80	10 ~ 80	10 ~ 80	10 ~ 80	20 ~ 80	20 ~ 80	10 ~ 80	10 ~ 90
Power input	DC 12V	DC 12V	DC 12V	DC9~16V, <100mA	DC 12V	DC 12V	DC 12V 3A	DC 9 ~ 12 V
Battery input	X	X	X	X	X	X	DC 12V	X
<b>INPUT</b>								
Push release button	1	2	4	X	Yes	Yes	1	X
Door sensor	1	2	4	X	X	X	1	X
Siren mute	X	X	X	X	X	X	1	X
AUX	1	2	4	X	X	X	X	X
Types of AUX input supported	Motion detector, passive DIR detector, curtain passive infrared detector, pet immunity PIR detector, two beam digital active infrared detector, heat detector			X	X	X	X	X
<b>OUTPUT</b>								
Door lock (DC 12V 10A form C relay)	1	2	4	X	3	3	1	16
Siren output	X	X	X	X	X	X	1	X
AUX output (DC 30V 2A Form C relay)	1	2	4	X	X	X	X	X
Types of AUX output supported	Gas detector and compatible sensors, Piezo strobe siren, electronic siren			X	X	X	X	X
<b>CHANNELS</b>								
	X	X	X	X	3 FORM C Relay output, NO/NC selected via jumper Wiegand 26-bit input	3 FORM C Relay output, NO/NC selected via jumper Wiegand 26-bit input	1 FORM C Relay output, NO/NC selected via jumper Wiegand 26-bit input	16 FORM C Relay output, Fail-Safe bypass design
<b>SOLUTION/ SOFTWARE</b>								
	INGRESS	INGRESS	INGRESS	INGRESS	TimeTec TA, TimeTec Security, TimeTec Access, TimeTec VMS, i-Neighbour	TimeTec Security, i-Neighbour	TimeTec TA, TimeTec Security, TimeTec Access, TimeTec VMS, i-Neighbour	TimeTec Security, TimeTec Access, TimeTec VMS, i-Neighbour



# Hardware Selection Guide

FingerTec has an extensive range of biometric and card products. This guide serves as initial tool for you to compare it against your requirements and budget. Once you have decided on the models you want or if you have any further questions, email us at [info@fingertec.com](mailto:info@fingertec.com) for detailed discussions. FingerTec pledges to make things easy for you, always.

FEATURE	AUTHENTICATION					DISPLAY		COMMUNICATION								Bundled Software	Price Range
	Fingerprint	Face	Card	Password	QR Code	Back & White	Color	RS232/RS485	TCP/IP	Bluetooth	WiFi	3G	USB	Wiegand	Push Technology		
<b>Time Attendance Model</b>																	
TA500	✓	×	A	✓	×	×	✓	A	✓	×	×	×	✓	×	×	TCMS V3	★
TA700W	✓	×	×	✓	×	×	✓	×	×	×	✓	×	✓	×	✓	TCMS V3	★★
AC100C	✓	×	×	✓	×	×	✓	A	✓	×	×	×	✓	×	✓	TCMS V3	★★
TA100C	✓	×	A	✓	×	×	✓	A	✓	×	A	×	✓	×	✓	TCMS V3	★★★
TA100C-R	✓	×	✓	✓	×	×	✓	A	✓	×	A	×	✓	×	✓	TCMS V3	★★★
TA200 PLUS	✓	×	✓	✓	×	×	✓	A	✓	×	A	A	✓	×	✓	TCMS V3	★★★★
TA200 PLUS (POE)	✓	×	✓	✓	×	×	✓	A	✓	×	A	×	✓	×	✓	TCMS V3	★★★★
Face ID 4	×	✓	✓	✓	×	×	✓	×	✓	×	A	×	✓	×	✓	TCMS V3	★★★★
TimeLine 100	×	×	✓	✓	×	✓	×	A	×	×	×	×	✓	×	✓	TCMS V3	★★
<b>Access Control &amp; Time Attendance Model</b>																	
AC900	✓	×	×	✓	×	✓	×	✓	✓	×	×	×	×	✓	×	Ingress	★★
R2	✓	×	✓	✓	×	✓	×	✓	✓	×	×	×	✓	✓	✓	Ingress	★★★★
R3	✓	×	✓	✓	×	×	✓	✓	✓	×	×	×	✓	✓	✓	Ingress	★★★★
R2c*	✓	×	✓	×	×	×	×	RS485 only	×	×	×	×	×	×	×	×	★
R3c*	✓	×	✓	×	×	×	×	RS485 only	×	×	×	×	×	×	×	×	★
H2i	✓	×	✓	×	×	×	×	✓	✓	×	×	×	✓	✓	×	Ingress	★★
Q2i	✓	×	✓	✓	×	×	✓	✓	✓	×	A	A	✓	✓	✓	Ingress	★★★★
Face ID 2FMM	✓	✓	✓	✓	×	×	✓	✓	✓	×	A	A	✓	✓	✓	Ingress	★★★★
Face ID-X	✓	✓	✓	✓	×	×	✓	✓	✓	×	A	A	✓	✓	✓	Ingress	★★★★
Face ID 3	×	✓	✓	✓	×	×	✓	✓	✓	×	A	×	✓	✓	✓	Ingress	★★★★
Face ID 4D	×	✓	✓	✓	×	×	✓	×	✓	×	A	×	✓	×	✓	Ingress	★★★★
Kadex	×	×	✓	✓	×	✓	×	✓	✓	×	×	×	✓	✓	✓	Ingress	★★
m-Kadex	×	×	✓	×	×	×	×	✓	✓	×	×	×	✓	✓	×	Ingress	★
i-Kadex*	×	×	✓	×	×	×	×	×	×	×	×	×	×	✓	×	×	↓
k-Kadex*	×	×	✓	✓	×	×	×	×	×	×	×	×	×	✓	×	×	↓
<b>Controller, QR Reader &amp; IoT</b>																	
INGRESSUS I	×	×	✓	✓	×	×	×	RS485 only	✓	×	×	×	×	✓	×	Ingress	★★
INGRESSUS II	×	×	✓	✓	×	×	×	RS485 only	✓	×	×	×	×	✓	×	Ingress	★★
INGRESSUS IV	×	×	✓	✓	×	×	×	RS485 only	✓	×	×	×	×	✓	×	Ingress	★★★
QR110	×	×	×	✓	✓	×	×	RS485 only	×	×	×	×	×	✓	✓	×	★
BLE-2	×	×	✓	×	×	×	×	×	×	✓	✓	×	×	✓	×	TimeTec TA/ i-TimeTec/ Access/VMS/ i-Neighbour	★★
BLE-3	×	×	×	×	×	×	×	×	×	✓	✓	×	×	✓	×	i-TimeTec/ i-Neighbour	★
BLE-5	×	×	×	×	×	×	×	×	×	✓	✓	×	×	×	×	TimeTec TA/ i-TimeTec/ Access/VMS/ i-Neighbour	★★
BLE-16	×	×	×	×	×	×	×	×	×	✓	✓	×	×	×	×	i-TimeTec/ Access/VMS/ i-Neighbour	★★★★★
<b>Logical Fingerprint</b>																	
OFIS-Z	✓	×	✓	×	×	×	×	×	×	×	×	×	✓	×	×	InfoManager	★

\* = Slave reader | ✓ = Available | ✗ = Not available | A = Available Upon Request



# Software Selection Guide

offers a variety of different softwares to suit the different business needs of our clients. With all the different requirements, comparing the different software functions can be a little tricky. So here's a selection guide to help you out with the details, similarities, and differences between our offered solutions.

APPLICATION FEATURE	Functionality	Database Engine	Mobile App	OS/Browser	Hardware	Total Reports	Export Format	Languages	Price
<b>WINDOWS APPLICATION</b>									
	Advance access control and complete time attendance	MySQL, MS Access	Android and iOS	Server 2003, Server 2008, Windows Vista, Windows 7, Windows 8, Windows 10	AC900, R2, R3, H2i, Q2i, Kadex, m-Kadex, Face ID 2/3/4d/X, Ingressus I/II/IV, QR110	36	CSV, TXT, XLS	Arabic, Bulgarian, Chinese (Simplified), Chinese (Traditional), English, French, German, Hindi, Indonesian, Kurdish, Malay, Persian, Portuguese, Russian, Spanish, Thai, Vietnamese	Bundled with hardware
	Visitor management system	MySQL	N/A	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	AC900, R2, R3, H2i, Kadex, m-Kadex, Face ID 2/3/4d/X, Ingressus I/II/IV, QR110	5	PDF	Arabic, Bulgarian, Chinese (Simplified), Chinese (Traditional), English, German, Hindi, Indonesian, Kurdish, Malay, Persian, Portuguese, Russian, Spanish, Thai, Vietnamese	Payable
	Complete time attendance	MS Access	N/A	Server 2003, Server 2008, Windows Vista, Windows 7, Windows 8, Windows 10	TA300, TA500, TA700W, AC100C, TA100C, TA200Plus, Timeline 100, Face ID 4	28	CSV, TXT, XLS	Arabic, Bulgarian, Chinese (Simplified), Chinese (Traditional), English, French, German, Hindi, Indonesian, Kurdish, Malay, Persian, Portuguese, Russian, Spanish, Thai, Vietnamese	Bundled with hardware
<b>TIMETEC CLOUD-BASED APPLICATION</b>									
	Cloud-based platform to consolidate and centralize the database for time attendance	MySQL	N/A	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	AC100C, TA100C, TA200 Plus, TA700WAC900, R2, R3, Q2i, Timeline 100, Kadex, Face ID 2/3/4/4d, Android phones, iPhones (BLE-2 & 5, TA only)	N/A	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	Advance attendance	MySQL	Android and iOS	Safari, Google Chrome, Mozilla Firefox, Internet Explorer		34	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	Security guards and patrol management	MySQL	Android	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	NFC tags, Bluetooth Beacon and Android phones	6	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	HR workforce hiring	MySQL	Android and iOS	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	×	TBA	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	Leave management	MySQL	Android and iOS	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	Android phones and iPhones	21	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	Employee Management	MySQL	×	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	×	1	CSV, TXT, XLS	All languages (Original + Machine translations)	Free/ Subscription
	Visitor registration and management	MySQL	Android and iOS	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	BLE-2, 5 & 16 Android phones and iPhones	TBA	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	Access control management	MySQL	Android and iOS	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	BLE-2, 5 & 16 Android phones and iPhones	8	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	Cloud video surveillance	MySQL	Android and iOS	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	IP cameras, Android phones and iPhones	4	JPEG	All languages (Original + Machine translations)	Subscription
	Residential and neighbourhood management	MySQL	Android and iOS	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	BLE-2, 3, 5 & 16 Android phones and iPhones	10	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	Standalone App for IoT devices	MySQL	Android & iOS	×	BLE-2, 3, 5 & 16, Smart Lock, IP Cameras, Smart Alarm, Android phones and iPhones	3	XLS	English, Chinese (Simplified & Traditional), Malay, Turkish, Spanish, Thai, Arabic, others upon request	Free
<b>SOFTWARE DEVELOPMENT KITS (SDK)</b>									
	To integrate FingerTec terminals to any third party system	×	×	Server 2003, Server 2008, Windows Vista, Windows 7, Windows 8, Windows 10	TA300, TA500, AC100C, TA100C, TA200 Plus, TA700W, AC900, R2, R3, H2i, Q2i, TimeLine 100, Kadex, m-Kadex, Face ID 2/3/4/4d/X	×	×	×	Free for registered developers
	To integrate OFIS scanners with any solutions	×	×		OFIS scanners	×	×	English	Free for registered developers
	To integrate Ingressus with any third party access control software	×	×		Ingressus I, Ingressus II, Ingressus IV	×	×	English	
	To integrate TimeTec solution with any third party systems	×	×	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	×	×	×	English	Free for registered developers
<b>SOFTWARE TOOLS</b>									
	To manage and edit users, faces, fingerprints, logs and terminals' information	MS Access, MSSQL	×	Server 2003, Server 2008, Windows Vista, Windows 7, Windows 8, Windows 10	TA300, TA500, AC100C, TA100C, TA200 Plus, TA700W, AC900, R2, R3, H2i, Q2i, TimeLine 100, Kadex, m-Kadex, Face ID 2/3/4/4d, Ingressus I/II/IV	×	TXT, XLS, XML, HTML	English	Bundled with hardware

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