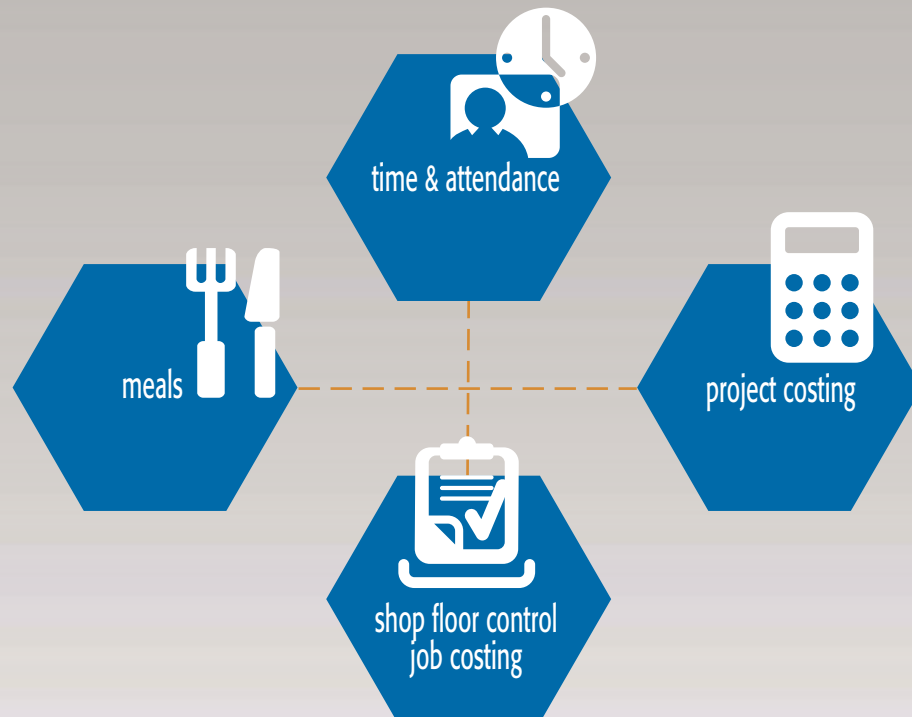




# PERSONNEL MANAGEMENT SOLUTIONS

Total  
employee  
management





# Synel

## Market leader

Synel is the market leader data collection since 1990, and has gained a worldwide reputation for innovation and quality in Time & Attendance, Access Control & Job Costing. As of July 2000 Synel is a public company, traded on the Tel-Aviv Stock Exchange. Synel's powerful, intelligent data collection hardware and software solutions enable complete control over employees and the workplace.

Synel strictly adheres to international standards, and is ISO 9001, UL and CE certified, as well as being IBM and SAP communication authorized.

### Synel Environments

- Communications
- Financial institutions
- Government
- Hospitals
- Industry
- Media
- Retail
- Schools
- Transportation
- Workplace
- ...more

### Synel Solutions

- Time & attendance
- Job costing
- Meals reporting
- Biometrics (card/fingerprint) based solutions
- Smartcard solutions
- Access Control & reporting
- Elevator activation
- Emergency reporting & followup
- Individual/group access
- Select area access: Lab/R&D/ storeroom entrance security
- HR & payroll
- Virtual access: Logon permissions

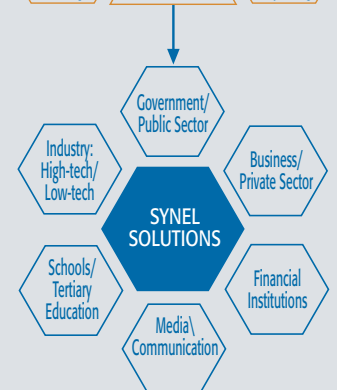
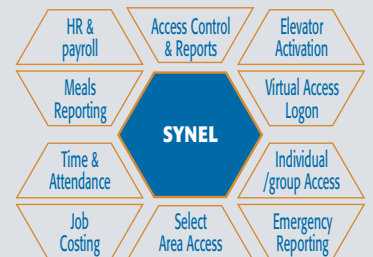


### Integrated systems under one roof

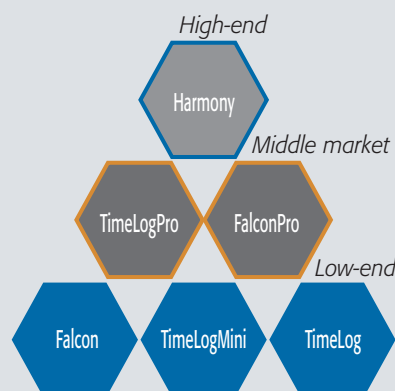
Synel's technology is among the best in the world and its products have been tested by a solid customer base of over 35,000 installations, and more than 180,000 terminals are installed worldwide. Above 90% of all Israeli government sites use Synel systems.

Synel invests considerable R&D resources in products and solutions that are modular, fully integrated with a wide range of data collection products, making Synel solutions cost-effective for any organization.

### Synel's presence within the organization



Synel in the marketplace





# Personnel Activities Management

A leading Time & Attendance provider, Synel offers solutions for small to medium organizations in nearly every industry worldwide, and has helped these companies enhance the performance of employees, managers, and overall operations.

Whether your needs are basic or advanced, you can depend on Synel attendance solutions to reduce the amount of time needed to prepare timesheets for payroll, improve workforce management, minimize errors, and track and manage labor expenses.

## Project Based Time & Attendance Software

- Time and Attendance
- Access Control
- Biometrics
- Shop Floor Data Collection (SFDC)
- Multifunction
- Meals
- Time clock software
- Shift differential
- Employee scheduling & time tracking
- Task Management
- Calculating overtime & absence balance

- **Easy Time Tracking**
- **Ensure accurate and timely timesheets**
- **Make quick decisions**
- **Easy Integration with existing payroll systems**

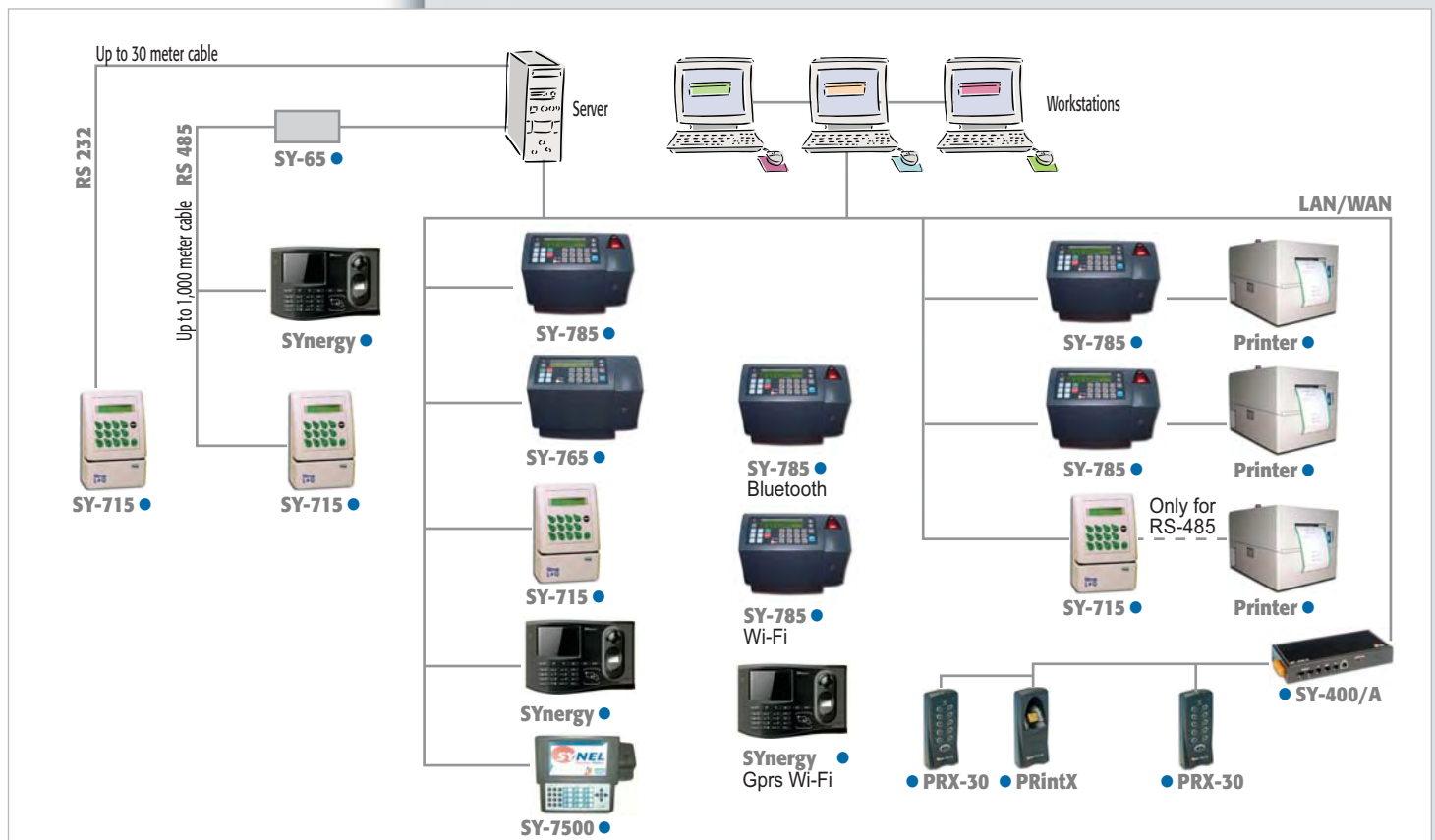
Make every minute count with Synel's solution - employee time tracking made easy

Make card technology available to your employees:

- Magnetic
- Barcode
- Proximity
- Smart card - Mifare, DESFire
- Biometric: Take advantage of additional security achieved with biometric verification or identification methods, such as fingerprint or by placing fingerprint template on smartcard for enhanced employee privacy.

## EVALUATE SYNEL ATTENDANCE SOLUTIONS TODAY!

Easy to use and implement and handles ALL employee activities under one roof.





### • Biometric Options

**Verification** of employee fingerprint versus employee number and/or badge.

**Identification** of authorized persons by biometric characteristics only.

**Fingerprint template on smart card** ensures employee privacy by storing template on personal smart card - not in organizational database. Fast verification process, with unlimited number of users per system.

### • Identification Methods

Biometric Fingerprint

Magnetic

Barcode

Proximity

Smartcard

### • Sensor Options

**Optical sensor:** Extremely durable/ scratch-resistant sensor surface. Recognizes fingerprints quickly and reliably, even dry, wet, scarred or soiled fingers. Has a solid sensor surface.

**Capacity sensor (T.C.):** Relatively hard coated surface as a solid state sensor

### • PoE

Synel solutions support PoE technology, which eliminates the need for complicated infrastructure setup.

- No need for extra separate cable runs

- Lower voltage (increased safety)

- Greatly reduces installation costs and complexity

- A known worldwide standard

- Reliability - enhanced protection against power overloads and spikes

- Efficiency - POE terminals can be remotely monitored and controlled for efficient management and troubleshooting power failures.



# Communication - Synel Wireless Solutions



## Wi-Fi Technology

Short for wireless fidelity, Wi-Fi is another name for IEEE 802.11B and a trade term promulgated by the Wireless Ethernet Compatibility Alliance (WECA). "Wi-Fi" is used in place of 802.11B in the same way that "Ethernet" is used in place of IEEE 802.3. Products certified as Wi-Fi by WECA are interoperable with each other even if they are from different manufacturers. A Wi-Fi product can use any brand of Access Point with any other brand of client hardware built to the Wi-Fi standard.

Synel's Wi-Fi solution is easily implemented in organizations with existing LAN network, using SY-765/785 and SY-400/A terminals, that easy to install and can be easily moved from one location to another.



## GPRS Technology

Synel now incorporates GSM / GPRS communication technologies in its SY-765/785 and SYnergy terminals and SY-400 controller. The General Packet Radio Service (GPRS) network is an "always on", private network for data. It uses the existing GSM network to transmit and receive TCP/IP based data to and from GPRS mobile devices.

GPRS provides the transmission of IP packets over existing cellular networks, and enables connection with Synel's terminals any time and in any place, especially in remote locations or in cases where infrastructure facilities are too expensive, difficult or impossible to establish.

The GPRS modem is built in the terminals as an option, which eliminates the need for the use of external wireless devices.

Through special adaptations and upgrades, older terminal versions can also be equipped with GPRS communication modem.

Terminals' remote wireless communication is ideal for:

- Construction or demolition sites
- Temporary school camps
- Vehicles
- Sports venues
- Military field bases
- Traveling groups (orchestras, seminars, and other events) And much more....

## Real Time Communication with SY-NetServer

### Fast communication application for interactive operation between terminal and database

The advanced .NET technology turns the well known SY-Net Server software into a quick and proficient tool, creating faster response, bi-directional communication in parallel, preventing memory leakage, and shortening the time needed for saving and deleting data from memory.

The user-interface has been re-designed and made more intuitive, to better serve the user - activity buttons were added for frequently performed activities, as well as additional helpful features.

- Simultaneous programming of multiple terminals which saves time and minimizes system inactivity time –all system programming takes a few minutes only.
- In this technology SY-NetServer fully supports .NET type DLLs together with previously supported technologies such as C++ and COM.
- Makes writing customized DLL much easier with a new and lighter interaction format.





# TimeLOG

## Comprehensive Time & Attendance Package

Streamlines workflow throughout the organization and handles ALL employee activities, including Time & Attendance, Access Control, Task Management, and Absence Balances.

Compatible with any employee card technology, including magnetic, barcode, proximity or smartcard. For additional security use cards with biometric verification or identification such as fingerprint or other biometric methods.

TimeLOG is designed for use in small to medium organizations, enhancing performance of employees, managers, and overall operations.

### Easy Time Tracking

- Enable employees to enter start and end times, with fingerprint template enrolment (at PC or time recording terminal). Define more than one card per employee for a specified time period, or assign several work rule agreements to a single employee per time period. Use Partial Absence - enabling the employees to book absences of several hours per day, and Periodic Absence or an absence date range. TimeLOG allows data adjustments (single employee or group of employees) according to selected dates.
- Smart email notification encourages prompt submission of timesheets.

### Make quick decisions

- Powerful real-time graphical management and control reporting.
- Obtain individual employee performance analysis reports on annual attendance, absences, late arrivals, overtime, etc.
- Catch problems such as: Inaccurate clocking and calculation errors, unauthorized overtime payments, accidental overpayments, and unfair or biased payments. Avoid legal disputes with employees.

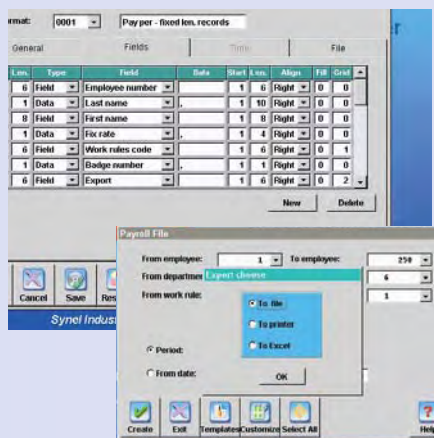
### Easy Integration to eliminate redundancy

- Full Integration with other leading project management and ERP solutions.

### Features

- Fingerprint: Increased access control security achieved with fingerprint at time recording terminal later verified against employee card swipe.
- Multi-card definition: Defines more than one card per employee for a specific time period
- Assigning several work rule agreements to one employee per specific time period
- Clock key tab function field: Partial Absence: Enables employee absence bookings of several hours per day; Periodic Absence: Enables employee absence booking by date range.
- Management and control reports generation
- Annual Reports: Employee performance analysis - annual attendance, absences, late arrivals,, overtime, etc.
- Employee and project file utilities import
- Multi-level project costing module: Provides costing information according to man-hours and direct costs
- Multi-lingual system
- Easy to use, configurable, 100% Web-based
- Extended employee file to enter and update all personal employee details

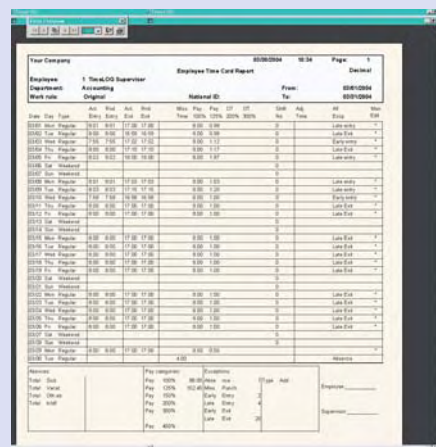
*Fast ROI - TimeLOG typically pays for itself within 6 months*



**Export** Simplified interfacing with most payroll programs



**Employee** Extended employee file, for storing and updating all employee personal information. An MSWord document may be attached to each file.



**Edit** Enables data adjustments for an employee or group of employees, according to selected dates.



**Statistics** Powerful reports present periodic Time & Attendance related statistics, such as overtime, late arrivals, sick leave, etc.



# TimeLOG PRO

## TimeLOG PRO Personnel Solutions

- Built-in Employee Agreements template: Use as-is/customize
- Global absences: Defining multiple employee periodic absences
- Weekly, bi-weekly, semi-monthly, monthly and flexi-pay periods
- Accommodates fixed and flexi-time schedules
- Comprehensive PDF format online help
- Forecast screen for monitoring and planning absences
- Access control for small- to medium-size enterprises
- Online display of totals and employee balances (only on TCP/IP using SY-Server)

## EVALUATE TimeLOG PRO TODAY!

### Terminal Options



### System Requirements

- Intel Pentium processor or higher, Windows NT/ME/2000/2003/XP/2008/Windows 7 (32/64bit)
- 512MB RAM
- 100MB hard disk space
- 256 color (8 bit) display adaptor
- CD-ROM drive
- Optional sound card for event notification
- Optional TWAIN compliant capture card or scanner for Falcon PRO



### Time & Attendance Module

- Solution for advancing companies to automated and accurate time tracking of employee hours
- Streamlines payroll processes

### Access Control Module

- User-defined parameters based on pre-established rule; monitor access, identifying users requesting access, recording access attempts, and granting/denying access.
- Increased security and safety within the organization, safeguarding both staff and company assets.

### Project Costing Module

- Collecting and tracking employee work hours in pre-defined projects, from various departments – basis for accurate costing.

### Absence Balance Module

- Monitoring all paid absences.
- Alarm whenever an employee attempts to exceed entitlement while booking an absence. Monitored balances include vacation, sick leave, etc.

### Meals Module

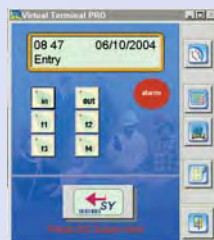
- Simple and convenient way to manage all meals provided for employees. Only available in the TimeLOG PRO version.
- Manage meal types (breakfast, lunch, dinner, light meal, vegetarian, sandwiches) and meal contractors.
- Rate meal preferences, forecast preferred meals, define meal rules per employee, and calculate company's meal costs/employee/guest/contractor.

**Work rules** - Set of agreements, specifying various organization work rules

**Access definitions** - Permissions defined per employee, per door, per time zone

**Project costing** - Specifying projects and related employee hours

**Future absences** - Generated reports enable both maintenance of accurate absence records and future planning



### Virtual Terminal

Employee reports attendance directly from PC workstation, instead of time-recording terminal



**P.I.P.** Presence information panel with online graphic report displaying employee present/absent status

# Harmony Personnel Information Management System

## Harmonize Your Organization's Activities

The innovative Harmony Personnel Information Management System combines all the organization's employee activities. Harmony uses a single online database, available to management and decision-making staff.

Synel developed Harmony - the "all under one roof" solution - to give managers the ability to check and control employee activities in the organization, from attendance and production to access control and human resources.

### All-Round Solution Modules

- Time & Attendance
- Access Control
- Job Costing
- PC Secure Access
- e-Harmony-Web Reporting
- Notifier

### Benefits

- Information from a single database, available and accessible to all departments in the organization, including: Production, security, management, etc.
- Reduces incorrect reporting
- Cuts down on staff required to handle multiple systems
- Attendance reporting module linked to PC's Secure Access module for enhanced security of organization data
- Prevents database duplication
- Eliminates need for separate updating of various systems
- Automatic interfacing with external systems
- Modular system enables gradual additions and upgrades according to organization's expanding growth and requirements
- Fully integrated with Synel hardware (terminals, readers, and controllers), developed and supported by a single manufacturer
- Audit trail

### Attendance Module

Offers accuracy and efficiency in employee activities for payroll purposes. Gathers all attendance data, applies pre-set work agreements and, in realtime, calculates hours worked for payroll calculation.

- Multi-organization system with full online realtime viewing of employee presence/ absence
- Flexible work agreements and parameters
- Supports multiple calendar formats
- Five employee connectivity levels: Zone, factory, section, department, and work center - adjustable according to client requirements
- Reports: New/customizable, dynamic authorization, including reading or reading/writing into a table
- Flexible import/export options to Excel/PDF, including email
- Cost center module

### Job Costing Module

Controls and monitors production resources and shop floor activities.

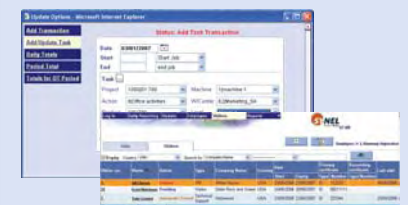
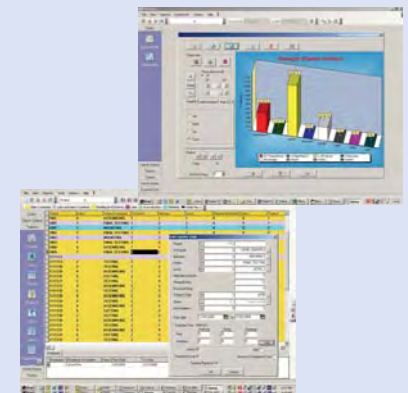
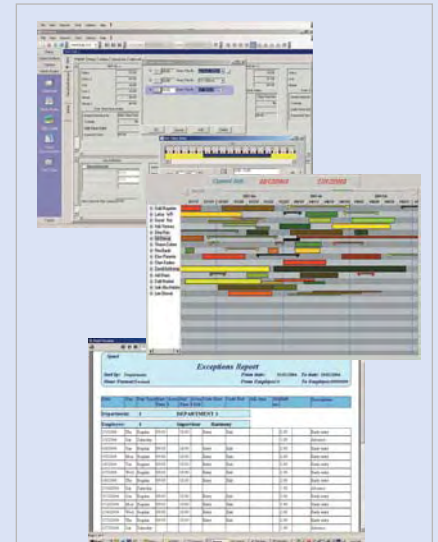
Job procedures and work methods are more efficient subject to correct evaluation, based on data collected directly from the shop floor - the first step towards decision-making success. Harmony's Job Costing module enables control and accurate calculation of hours invested in various job orders.

- Follow-up on shop floor, job progress, customer orders, and efficiency and production statistics
- Graphic display of customer order status and efficiency reports (employee or machine)
- Supports route cards/job order, product tree support, and actual price setting
- Reports: Efficiency, and attendance/job comparison
- Data collection from controllers/machines
- Connectivity with ERP and inventory systems

### Web Interface Module

#### Harmonize the Organization's Activities

- Use of organization's Intranet and full employee accessibility
- Multi-level accessibility to data by employee hierarchy and authorization level
- Employee viewing and updating of reports - management viewing/approval of employee data according to predetermined levels
- Realtime workstation attendance/jobs reporting
- Reports generated according to manager/employee authorization level
- Reports generated in PDF, Word and Excel formats for viewing or printing for various requirements
- Employee definition - new/updated
- User data correction, including supervisor's approval of modifications
- Optional extra employee badge produced in case of loss



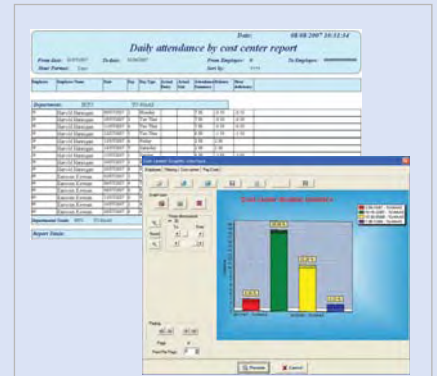


# Features

## Cost Center

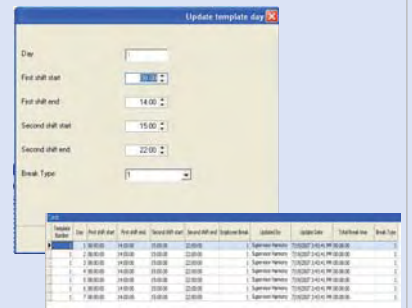
Cost center module enables analyzing attendance data according to various cost centers for support of specific sectors such as hotels and retail chains.

This module enables defining Cost Center units which can then be treated in various ways within the system. This module allows tracking and following employee's activities according to the pre-defined cost center, the amount of time spent on each center and the way this activity is divided between employees and employee groups.



## Assigning Work Schedules

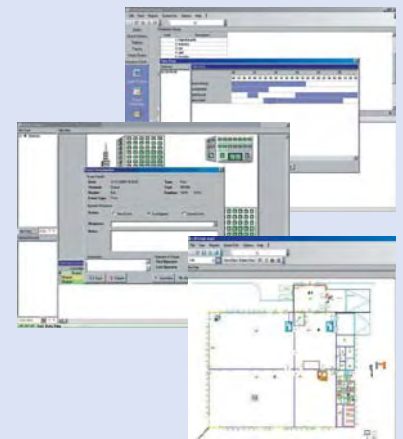
The Work Schedule module enables assigning employees to shifts (or import from an Automatic Scheduling System) for comparison with the individual work rules. Seven days work schedules are made into templates which are assigned to employees and edited as required. The Work Schedule template can be changed periodically, while Work Rules define the basic agreement between employee and the organization, and remain static and unchanged.



## Access Control Module

Personalized card and printing, CCTV, Vicon, Pelco, GeoVision. Limited access to any specified area; realtime exact location viewing of any individual; location/ movement reports of all persons for security purposes.

Supports OPC protocol.



## Visitor Module

Planned visits preparation, visitor definition, and pre-screening of planned visitors for security and guard management, as well as future planned visits.



## P.I.P

Displays the last information item entered for an employee, which enables verification whether the employee is present or absent, in or outside the organization. The system enables sending a mail message or displaying employee's details and photo.

Useful for use where there is a demand to follow employees' attendance in real time, without direct access to Harmony or to Harmony reports

Display of an icon next to employee's name according to job title – enables locating the most suitable employees in case of an emergency situation



## Secure Access Module

Utilizes employee entrance and exit reporting to secure access to employee's personal computer. Limits access to sensitive data throughout the organization to "authorized personnel only." PC login/logoff during entrance or exit reporting, or by absolute personal identification methods such as fingerprintscan.

## Messenger Center (Notifier Module)

Unique managerial tool for the organization's Harmony manager. Enables sending/receipt of information and data alerts from within Harmony, according to pre-set definitions. Data contains employee attendance information in keeping with the organization's work rules.

Alerts originate from data in the access control system, about exceptional and unusual events occurring in the system. Information is sent via SMS or email, according to pre-defined intervals, and includes data completion history in during success or failure.

Notifier is compatible with all Harmony modules – Time & Attendance, Access Control, Job Costing and Web. Sample operations:

- **T&A module** – Department manager may receive an email each morning, informing him of employee tardiness
- **Access Control module** – Possible SMS alerts of forced intrusion, subject to Harmony definitions

## System

- Database based on MSSQL2000/2005/2008
- Client server system
- Realtime system
- Online validity checks
- Web-based reporting
- Dynamic interface enabling personalization
- Role-based security - highly configurable
- Smart email notification
- Powerful real-time reporting engine
- Highly sophisticated identification - ensuring ultimate accuracy: Fingerprint, Contact/contactless smartcard, Proximity, Magnetic, Barcode







# Schedule Master

## Time to Maximise Your Workforce

Schedule Master - the intuitive software that streamlines your shift management, optimises effectiveness and saves money.

In your line of business, dealing with a diverse workforce and shift rostering, you need to gain maximum benefit from your staff while minimising payroll costs.

Schedule Master's sophisticated scheduling algorithm organises staff rosters, deploys employees in the most cost-effective manner and guarantees optimal time-effectiveness while avoiding errors. Schedule Master is designed for medium to large size companies and organisations.

Schedule Master can either be implemented on its own, or integrated with Harmony - Synel's complete workforce solution for managing employees' activities in the organization.



### Benefits

- Proven time & cost saver
- Enables up-to-date information on all employees' skills, qualifications and restrictions
- Analyze and deploy employees over a variety of time frames: daily, weekly, monthly and annually
- Schedule days off, holidays and sick leave
- Hierarchical access for different levels of the organisation provides overall security feature
- Automatic rostering or manually assign the best employee to a specific position at the optimal time
- Real-time warnings prevent manual input errors
- A wide range of addition options, such as automatic SMS or e-mail to each employee informing assignment, and much more
- Web based architecture enables employees to post and receive rostering updates via internet
- Eliminates overtime by offering reliable cost-analysis
- Improved decision making with relevant online business information

- Cuts needless expenditure and saves money on staff management
- Open interface for complementary systems and applications
- Web based solution which enables central management and control
- Online alerts on miss-attendance and staffing problems

### Ultimate Integration

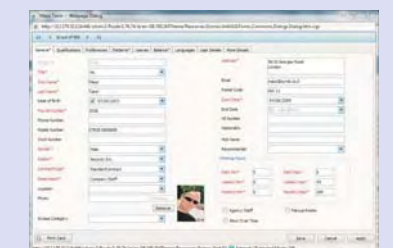
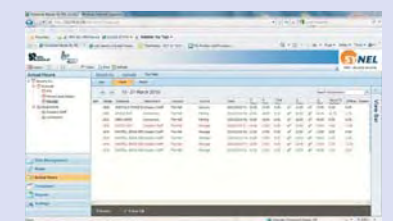
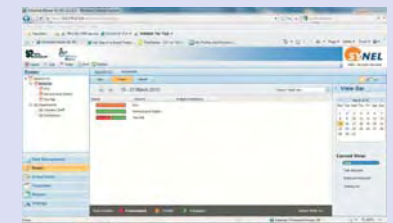
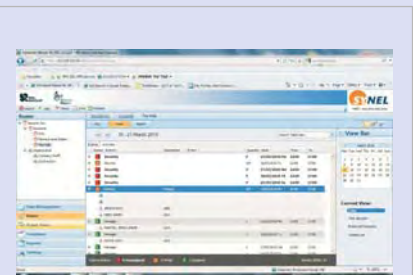
Schedule Master's web-based architecture enables total integration with all existing HR, payroll and customer billing systems at your organisation. This modular solution can be structured with self-service features and programmed to fit your specific organisational characteristics, establishing a platform for updates and future upgrades.

### Cost Effective

Schedule Master is a money saver for any organisation. By dramatically enabling to gain greater control over staff placement and presence, it prevents unnecessary expenditure and ensures that the most cost-effective employees are utilised at all times.

### Methodological Skill

Synel uses advanced methodologies in order to implement the Schedule Master solution, tailored to any organisation's size and specific scope of activities, and allows for varied and scalable licensing premises.



# Synel solutions in the organization

## Terminals



### ● SY-765

Online and offline operation for all scheduling morning/evening functions. Bell activation according to week day, regardless of program currently running on the terminal. Time displayed in several formats (US, Europe, military, or 12-hour).

#### Technical Characteristics

Includes:

- One relay for bell, door, etc...
- One sensor (door monitoring etc..);

#### ● Display:

Backlit LCD, 2 rows of 16 characters  
Alarm LED for irregularities notification

#### Interfacing

- RS-485 for up to 32 terminals
- RS-232 for Host connection

#### Power Requirements

- Operating power - 110/230 Vac
- Back-up battery - rechargeable, included

#### Options

Internal modem (14,400 bps)  
10/100 Mb Ethernet card for TCP/IP - POE option  
Bluetooth Class II  
POE 802.3 af

#### Physical Characteristics

- Dimensions: Height: 17 cm  
Width: 25 cm  
Depth: 9.5 cm  
Weight: 1.120 kg
- Operating temperature: -20 - 60°C
- Humidity: up to 95% RH
- Power Requirements:
  - Operating power - 110/230 Vac @100 mA
  - Back-up battery - rechargeable, included



### ● SY-785

Offline data collection system. Parametric programming with an internal database and can be used online when working with the SY-Server. Provides single/multi-step or conditional reporting, and validates data and selects input source (magnetic reader, keyboard, etc.).

#### General Features

- Scheduling for required functions - for morning and evening periods, set the terminal for "swipe & go"; during the day, leave it set to record jobs.
- Technician mode is available for easy setup of the terminal.
- Enable the activation of a bell according to the day of the week, regardless of the program that runs on the terminal.
- Scheduling modem operation times.
- Displays time in several formats (US< European, military AM/PM)

#### Technical Characteristics

- Display:
  - Backlit LCD, 2 rows of 16 characters
  - Alarm LED for irregularities notification



### ● SY-745

#### Interfacing

- Optional:
  - internal 14,400 bps modem
  - Ethernet 10/100 mHz, POE 802.3 af
  - Wireless Wi-Fi 802.11 b
  - Bluetooth Class II

#### Fingerprint Sensor Options

- Optical sensor
- Has an extremely durable and scratch resistant sensor surface
  - Can recognize virtually everyone's fingerprint quickly and reliably
  - Has a solid sensor surface
- Capacity sensor
- Has relatively hard coated surface as a solid state sensor

### Comparison table between SY-785, SY-765 and SY-745 terminals

	SY-785	SY-765	SY-745
Fingerprint/Templates	Yes/9090	No	Yes/9090
Memory	512	512	256
Functional keys	8	6	2
Numeric keys	10	10	10
Control keys	4	4	4
FP on card	Yes	No	No
Magnetic reader	Yes	Yes	Yes
Proximity reader	Yes	Yes	Yes
Barcode reader	Yes	Yes	No
Weigand reader	Yes	Yes	Yes
Mifare Reader	Yes	Yes*	Yes*
Printer support	Yes	No	Yes
IO	2-2	2-2	2-2
Wi-Fi	Yes	Yes	Yes
GPRS	Yes	Yes	No
I <sup>2</sup> C	Yes	No	No
Modem	Yes	Yes	Yes
Weigand output	Yes	No	No
Hex KB	Yes	Yes	No
Alpha KB	Yes	No	No
Rubber silicon keyboard	No	No	No
TCP/IP	Yes	Yes	Yes
POE	Yes	Yes	Yes

\*Read only

# Synel solutions in the organization

## Terminals



● SY-7000



● SY-7200



● SY-7500

The SY-7000 series terminal is Synel's top of the line data collection terminal. The SY-7000 series data terminal has the capability to accommodate auxiliary inputs and outputs used to control a wide variety of systems ranging from door access control to bells and alarms. Due to its Open Source Linux OS, the SY-7000 series can be used as an external platform for programming, which makes it the ideal terminal for software houses, that can freely and easily tailor applications in to their own specific needs.

### Operating System

- Embedded Linux
- Open Source
- Stable and reliable OS
- Supports standard advanced communication methods (TCP/IP, HTTP, FTP)
- Easy to write your own applications
- Well developed API to interface with all unique hardware devices

### Physical Characteristics

- Dimensions:
  - Height: 24 cm (9.53")
  - W/wall mount-25.19 cm (9.92")
  - Width: Top-26.6 cm (10.5")
  - Bottom-23.52 cm (9.26")
  - With mag. reader-30.8 cm (12.16")
  - Depth w/wall mount: 12.5 cm (4.92")
  - Weight: 2.650 kg

- Power Requirements:
  - DC Power Input (@ J15):
  - 15 VDC nominal; -1% - +7% (1)
  - 1. 0.25 - 1.5 A @ 15 VDC (2)
  - 2. 3.75 - 22.5 Watts (2)

### SY-7000 Series Features Comparison

Model	SY-7100	SY-7200	SY-7500
Processor	MPC885	MPC885	MPC885
SDRAM	8MB	8MB	16MB
Flash Memory	16MB	16MB	16MB
Additional memory option (up to 4GB)	✗	✓	✓
Plug and Punch capability	✓	✓	✓
Two PCMCIA slots	✗	✓	✓
Audible accept/reject tones	✓	✓	✓
Visual accept/reject/error lights	✓	✓	✓
USB Ports (host or device)	✗	✓	✓
Supports an additional external LCD display	✗	✗	✓
Real-time and offline operation	✓	✓	✓
Customizable overlay option	✓	✓	✓
Internal lithium clock battery (10 year life)	✓	✓	✓
On-screen QWERTY keyboard	✗	✗	✓
Display			
4x20 Backlit LCD Text (6.5")	✓	✓	✓
480X800 graphical colorLCD touch screen	✗	✗	✓
Communications			
Ethernet 10/100 Base-T (RJ-45)	✓	✓	✓
RS-232 connection (DB9)	✓	✓	✓
RS-485 connection (RJ-12 4 wire full duplex)	✓	✓	✓
Optional Modem (1200 - 28.8kb)	✓	✓	✓
Optional Wireless (802.11b)	✗	✓	✓
Optional POE	✓	✓	✓
Weigand (1-Output, 2-Input)	✗	✓	✓
Employee Identification Options			
Keypad (numeric + 12 function + directional keys)	✓	✓	✓
Magnetic (Track 1, 2 or 3, low or high coercivity)	✓	✓	✓
Barcode (decodes most 1D barcodes with auto discriminate capabilities)	✗	✓	✓
Proximity	✓	✓	✓
Fingerprint (1:n identification or 1:1 verification)	✗	✓	✓
Support For External Devices			
Barcode Wand/Gun (USB)	✗	✓	✓
QWERTY Keyboard (USB)	✗	✓	✓
Printer (USB)	✗	✓	✓
Reader with Wiegand Output	✗	✓	✓
Relay - Bell & Access Control (solid state optoisolated)	✗	✓	✓

# Synel solutions in the organization

## Terminals



### ● SY-715

Synel's SY-71X series of intelligent, programmable data collection terminals are designed for cost effective Time & Attendance applications. They are ideal for fast and precise internal data reporting, with both the security of a self-contained unit and the flexibility of a PC-linked system.

#### Physical Characteristics

- Dimensions: 17 cm x 11.1 cm x 6.3 cm
- Weight: 765 gr
- Voltage: 230 / 115 Vac + 10%, 50 / 60 Hz
- Current consumption: less than 5 watts

#### Optional Accessories

- Internal Modem for remote communication (14400 bps)
- 12 Vdc, 1 A dry-contact relay to control a bell or a door latch

#### Functional & technical Characteristics

- Magnetic (track 1, 2 or 3) / bar code (3-of-9, 2-of-5, 128) /proximity / touch memory built-in readers
- Compatible Wiegand format: 26, 27, 32, 34, 36, 37, 42, 44, 48 and 86 Bits
- Operates both off-line and on-line with a host computer under multiple operating systems (Win XP, OS/2, XENIX, UNIX and VMS)
- Operate as a stand-alone terminal
- 12 dual /numeric function keys, six of which are programmable. All keys are provided with LED indicators
- High quality, illuminated LCD display with two lines of sixteen characters
- Master badge for set-up and diagnostics
- Battery protected 128 kB RAM for storing over 10,000 transactions
- Rechargeable back-up battery enables over 10 hours of full operation during power failure
- RS-232 and RS-485 communications for multidrop of up to 31 terminals on a single communication port, TCP/IP, Bluetooth, Wi-Fi, Modem
- Maximum distance from host - 3 km (RS-485)
- Audible tones for badge acceptance/rejection
- Warning indicator for memory status
- Variable communication rate (1200 to 19,200 bps)
- Terminals are provided with a wall mounting bracket
- Auto dialing polling data (Integrated with SY-Server)



### ● SY-777/A

Easy-to-program data collection terminal, designed for effective Time & Attendance, Shopfloor Control, Job Costing, and Access Control applications. Provides the optimum solution for Net connectivity (TCP/IP), and communicates online, in realtime with various databases on a PC and operates as a standalone or as part of a network.

#### Physical Characteristics

- Size: 24 cm x 15 cm x 8.5 cm
- Weight: 1250 gr.
- Voltage: 230/110 Vac+10%, 50/60 Hz
- Current Consumption: max. 100 mA
- Temperature: -20° to 70° C
- Humidity: up to 95% RH

#### Optional Accessories

- Secondary external magnetic/bar code/proximity reader for greater flexibility
- 12 Vdc, 1 A dry-contact relay to activate a bell or a door latch
- Internal modem 14,400
- Variable baud rate - 1200 -115000 bps
- Net connection:
  - Ethernet 10BASE-T/100BASE-T or AUI
  - POE

#### Functional & technical Characteristics

- Communication done via Ethernet, Modem, RS-232 or RS-485 for multidrop of up to 32 terminals on a single communication port
- Magnetic reader (track I, II, III)
- Bar code slot reader model (codesa: 128, 2/5, 3/9, UPC-EAN)/Proximity reader 125 KHz
- Weigand interface (26, 34, 36, 37, 44, 48 bit)
- Mifare 13.56 MHz - Serial number only
- Operates both off-line and on-line with a host computer under multiple operating systems: Windows 2000/XP
- 8 programmable function keys, 10 numeric keys, 4 control keys, 2 browsing keys, on an ergonomic designed keypad
- Illuminated 16x2 large alphanumeric character LCD display with backlighting
- Scroll keys allow users to view large messages on the display board
- 512 kB RAM for storing over 10,000 transactions
- Rechargeable backup battery for the memory and Real Time clock
- Rechargeable backup battery for operation with auto shut-off for use during power outages
- Two relays / two sensors
- Printer support
- A detachable Power cable

# Synel solutions in the organization

## Terminals

### ● SYnergy

The SYnergy terminal is Synel's latest Linux-based fingerprint biometric terminal, which combines a graphic color screen with technologically advanced features for all your time & attendance and access control applications.

The SYnergy is compact in size and attractively designed, and is also equipped with a built in camera and a speaker for generating various sound effects such as alert notifications, report confirmation / rejection and other actions and events indications.

SYnergy can be linked to a variety of networks in your organization to complement the management information systems that are already in place.



### Technical Specifications

Operating system	Advanced Linux embedded OS
High speed processor	ARM 9 - 200 MHz
Identification Unit	Optical fingerprint (FP) sensor
FP template size	1404 Byte
Registered FP Capability	3000 FP; Max. up to 10 FP per employee, 10,000 FP (optional)
FP Register	3 times
Fake Identification Rate	< 0.001% / < 0.1%
Identification Speed	RF card identification < 0.2 sec. / FP Identification < 1 Sec
Attendance Record (with photo)	52 MB - 7280 employees (1 MB can store 140 employees)
Attendance Record (with photo&2 FP/employee)	52 MB - 5200 employees (1 MB can store 100 employees)
Attendance Record (no photo)	676,000 employees
Identification Features	FP, PIN, FP + PIN, card + FP, camera + FP
Readers	Proximity, Mifare read only, Mifare R/W, Magnetic Track I, II, Barcode code 39/25/128
Memory Space	64MB SDRAM
Display	3.5" color TFT LCD; 320x240 pixels
Data Transmission Protocols	TCP/IP / HTTP, RS485/232, USB, GPRS, Wi-Fi (optional)
Network Interface	10/100 Base-T Ethernet
External reader	Weigand - 26, 34, 37 bit
USB (memory device)	USB 2.0
SD-card	Supports 1 G
Power	DC 5V, 2A, 100-240 / Volt, External adaptor, POE (option)
Environment	Temperature: 0 <sup>o</sup> -50 <sup>o</sup> Humidity: 10%-90%
Physical Dimensions	210x145x48(mm); Wall-hanging install
Camera	1.3 M pixels color camera
Output	1 relay
Input	1 relay
Sound	Voice Notice, birthday well-wishing, hour strike, alarm
Multi-media Function	Advertisement page broadcast, background music, MPEG files
Keyboard	6 programmable function keys, 10 alphanumeric keys, menu key
Back up battery RTC	3 years
Back up battery for operation	120 minutes
Coupon Printer	Supported
UL / FCC / CE / ROHS	Yes

# Synel solutions in the organization

## Terminals

### ● SY-Face - The most sophisticated recognition solution - AT A GLANCE!

The SY-Face is a time and attendance and access control terminal that uses face recognition technology to instantly identify users. The SY-Face provides a touch-free, hygienic alternative to fingerprint and hand readers, while still eliminating “buddy punching” and the need for cards or badges. Users simply look at the device and within seconds they are identified and either clocked in for work or granted secure access.



### Technical Specifications



**SY-910**  
T&A market for  
small businesses



**SY-920**  
T&A and access control  
market for medium to  
large businesses

<b>Processor</b>	TI DM 644 CPU 594 MHz	TI DM 644 CPU 594 MHz
<b>User capacity</b>	500	500 (1400- users optional)
<b>Record capacity</b>	150,000 records	150,000 access control records
<b>Recognition algorithm</b>	Dual Sensor™ V2.0	Dual Sensor™ V2.0
<b>Sensor</b>	Specialized double sensor	Specialized double sensor
<b>Verification method</b>	Face, PIN & face	Face, PIN & face, card, card & photo, card & face
<b>Verification speed</b>	Less than 1 second (1400 users)	Less than 1 second (1400 users)
<b>keyboard</b>	4*4 touch keypad	4*4 touch keypad
<b>LCD</b>	3.5" TFT color screen, 65,000 bright color, 320*240 resolution	3.5" TFT color screen, 65,000 bright color, 320*240 resolution
<b>Communication method</b>	TCP/IP, USB host	TCP/IP, USB host
<b>Power</b>	12V DC, working current 500 mA	12V DC, working current 500 mA
<b>Environment light</b>	0-5000 Lux	0-5000 Lux
<b>Working distance</b>	30-80 cm	30-80 cm
<b>Working temperature</b>	0-40°C	0-40°C
<b>Working humidity</b>	20%-80%	20%-80%
<b>Size</b>	200* 95* 115* mm	200* 95* 115* mm
<b>Weight</b>	505 gr	505 gr
<b>Installation method</b>	Wall mounting	Wall mounting
<b>Security image capacity</b>	-	4 GB SD card, 70,000 images
<b>Card recognition</b>	-	EM of Mifare card (optional)
<b>Interface for AC</b>	-	Relay for door lock
<b>Security alarm</b>	-	Tamper alarm
<b>Wiegand in &amp; out</b>	-	Standard Wiegand 26/34 output,
<b>Certification</b>	CE, FCC class and RoHS	CE, FCC class and RoHS

# Synel solutions in the organization

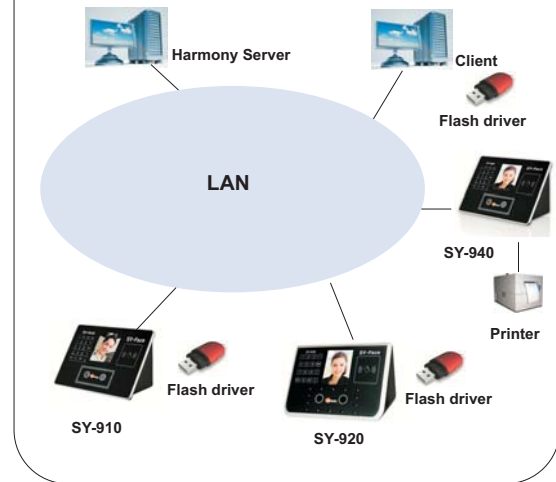
## Terminals

### ● SY-Face - Benefits:

- Accurate
- Dependable - Successfully deployed in challenging real time environments
- Trackable - The only biometric method where the transaction records can be visually confirmed
- Contactless - Non-intrusive, a non-contact verification process
- User-friendly
- Reliable performance
- Multi factor authentication

### System configuration

#### Stand alone or LAN system SY-910 / 920 / 940



### ● SY-400/A

#### Controls up to two doors

The SY-400/A Rev. 1 is an access controller for control of up to two doors, gates or other barriers. The SY-400/A is a part of a complete access control solution. All programming and monitoring functions must be done via PC with either Falcon, TimeLOG or Harmony software. The SY-400/A can also produce time & attendance transaction reports.

Two separate readers may be connected. Each badge reader may be used to open and record the use of a different entrance door, or both may be connected to different sides of the same door for independent control over entrances and exits.

Various readers can be connected to the SY-400/A, and they are adjusted to badges used by the client. Further, an optional PPrintX unit can be connected for biometric validation purposes. Two separate sensors may be connected to verify passage and door closure, or to serve other purposes.

#### Technical Specifications

- A direct connection of 2 readers: PRX-20, PRX-25, PPrintX, PRX-40, PRX-3A, PRX-30, SY-10, SY-1 and others
- Verification by finger print - PPrintX
- 3 operation methods: card only, card & PIN, card & finger print. Can be programmed for additional variations
- Up to 30,000 permitted cards
- Up to 20,000 transactions
- Two doors normally close/normally open relays
- Door control sensor
- Time zone by type of day (working day, holiday, etc.)
- Calendar support
- Two methods of a validity check:
  - local - independent of communication
  - on-line - by SY-Server
- Communication - RS 232/485, modem, TCP/IP



#### Interfacing

- RS-485 for up to 32 terminals
- RS-232 for Host connection
- Optional:
  - internal 14,400 bps modem
  - Ethernet 10/100 mHz, POE 802.3 af
  - Wireless Wi-Fi 802.11 b

#### Physical Characteristics

- Dimensions: Height: 11.5 cm  
Width: 30.3 cm  
Depth: 3.5 cm
- Power requirements: Voltage: 115/230 VAC

## Software

Software	Database	#Employees	Realtime	Visitor Module	T&A Module	Job Costing	Project Costing	Access Control	Meals	History Viewing	Retro Editing	Notifier	Card Printing	Web Interface
TimeLOG Mini	FoxPRO	50			x					x	x			
TimeLOG	FoxPRO	250			x					x	x			
TimeLOG PRO+														
PIP+ Virtual Terminal	FoxPRO	1,500	x optional		x		x	x	x	x				
Harmony	SQL	Unlimited	x	x	x	x	x	x	x	x	x	x	x	x

\* Expandable

# Synel solutions in the organization

## Accessories



### ● SY-785 Holder

Metal holder for wall mounting an SY-785 terminal, preventing access to cables and keeps them out of sight. The unit arrives with a safety screw (optional), to prevent removal by unauthorized personnel.



### ● SY-777 Holder

Metal holder for wall mounting an SY-777 terminal, preventing access to cables and keeps them out of sight. Unit arrives with a safety screw (optional), to prevent removal by unauthorized personnel.



### ● Fingerprint enrollment device

Synel's fingerprint enrollment device FP-S300 is a high performance USB fingerprint reader for efficient fingerprint authentication to be used with biometric supported fingerprint products (FPU-S). The module enables easy and convenient enrollment into various Synel systems such as: Syncomm, TimeLOG and Falcon. An immediate indication of template quality is passed on to the user, who views the received image instantly, enabling a decision to save the template or create an additional sampling. The created template is suitable for all FPU-S sensor modules. The ergonomic shape allows for fast and easy template sampling.



### ● Telereporting

Telephone data collection and reporting is essential and useful where a complete and cumbersome system is not required. Especially suitable for a small number of employees, or where employees are spread throughout numerous remote locations, and where a central location does not exist.

Data collection software is installed on a PC, where it registers phoned-in reports. An audio message is generated accordingly.



### ● SY-785 with Printer

Elegant casing turns the SY-785 terminal and printer into a single unit. The casing is easy to install and requires minimal maintenance. The door allows easy access to printer for paper insertion, without the need for unassembling cables. The casing may be adjusted according to the specific front panel of the terminal's magnetic/barcode or proximity reader.

### ● PRX35 / MFR35-KE-USB RFID Emulation Reader

PRX35/MFR35 is a proximity or Mifare card reader, that can support all versions of Window OS - Windows XP, Vista, Windows 7 (32 & 64 bit).

The reader has two versions that can be used as USB reader:

1. Reading Synel 125 KHz proximity cards - PRX35-KE-USB RFID
2. Reading Mifare UID (serial identification) - MFR35-KE-USB RFID

Both versions can be connected to the PC via the keyboard driver, and can be configured using a dip switch, so that card decoding is compatible with the various decoding methods customary in Synel.







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