

SYNERGY - Linux-based Fingerprint Terminal

Biometric, Color Screen, Real-time Monitor, Multimedia Terminal



Advanced technology with multiple choices

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

- Embedded Linux Open Source OS
- Powerful processor
- Fast matching time
- Handicap user-friendly
- Improved ROI
- Fast / multiple identification methods
- Compact and attractive design



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Time & Attendance | Access Control

Features

- Embedded Linux Open Source OS
- 3.5" TFT high clear graphic color LCD can display custom interfaces and staff color photos
- Unique T&A Photo-taking function with 1.3M pixels color camera, taking photos instantaneously to avoid any replaced T&A efficaciously
- Multi operation modes: FP, PIN, FP + PIN, card + FP, camera + FP
- Identification: 1:1 or 1:N
- Allowable finger rotation: +/- 30°
- USB connection (memory) - for information download / upload of pictures, video, advertisement or operating instructions from disk-on-key
- USB connection for communication to PC (option)
- SD memory card slot (standard 16)
- Standard 10/100 Mbps Ethernet interface
- Other readers such as proximity, magstripe, barcode, Mifare, Hitag, and HID are also available
- Battery back up - ability to continuously operate even during power failure (extended 3 hours)
- 6 function keys, 10 alphanumeric keys, 2 navigation keys and 4 additional keys
- Additional external reader (can be connected through Weigand 26 port)
- Multi network communication: TCP/IP, RS-232/485, optional: Wi-Fi, GPRS
- Protocols supported: HTTP / HTTPS / DHCP
- Coupon printer can be connected
- Embedded relay contacts lock, door button or alarm
- Built in embedded TCP/IP protocol

Benefits

- Fast matching time
- Professional design
- Easy installation, set up and use
- Intuitive user interface
- Accurate and fast fingerprint algorithm
- Easy adaptation to collect processes through parameter settings
- Memory can be dynamically distributed and extended according to staff quantity
- Provides accurate, reliable data
- Daylight saving time by date
- Quality standard approvals



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Technical Specifications

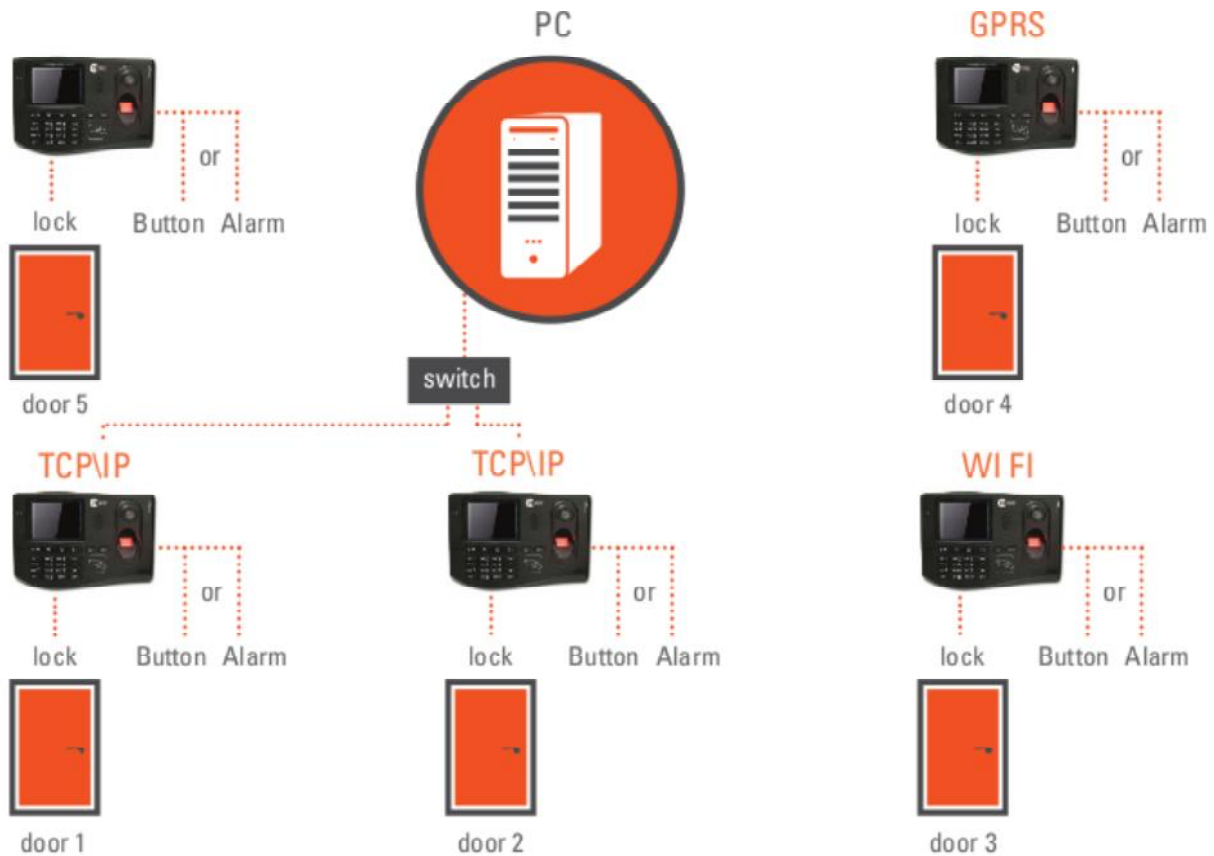
Operating system	Advanced Linux embedded OS
High speed processor	ARM 9 - 400 MHz
Identification Unit	Optical fingerprint (FP) sensor
FP template size	1404 Byte
Registered FP Capability	3000 FP; Max. up to 10 FP per employee, 10,000 FP (optional)
FP Register	3 times
Fake Identification Rate	< 0.001% / < 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	128 MB DDR
Display	3.5" color TFT LCD; 320×240 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 12V, 2A, 100-240 / Volt, External adaptor, POE (option)
Environment	Temperature: 0o-50o Humidity: 10%-90%
Physical Dimensions	210x145x48(mm); Wall-hanging install
Camera	1.3 M pixels color camera
Output	1 relay
Input	1 Opto coupler
Sound	Voice Notice
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
Certifications	FCC / CE / ROHS / TUV



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Network Diagram



Terminal Record Capacity

ID Type	No employees / 1MB	Memory	Total Employees	Microsoft GOLD CERTIFIED Partner
Non picture file	13,000	52 MB	676,000	
With picture	140	52 MB	7,280	
With picture & 2 FP	100	52 MB	5,200	



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