





WHO IS PACOM?

WHO IS PACOM?

PROTECT PEOPLE AND PLACES, SO THEY THRIVE

PACOM™ brings confidence and innovation to you and your clients.

RELIABLE SECURITY AND BUSINESS SOLUTIONS

- Industry-leading security and business systems for complex multi-site and campus environments
- 40+ years of global success in large-scale projects
- Seamlessly integrated hardware and software solutions for security and business



INNOVATIVE SECURITY INTEGRATION

- Bridging legacy gaps with smart devices and SaaS solutions
- Modular, cost-effective, and easily integrated product portfolio using the latest technologies
- Driven by providing simplicity in security management

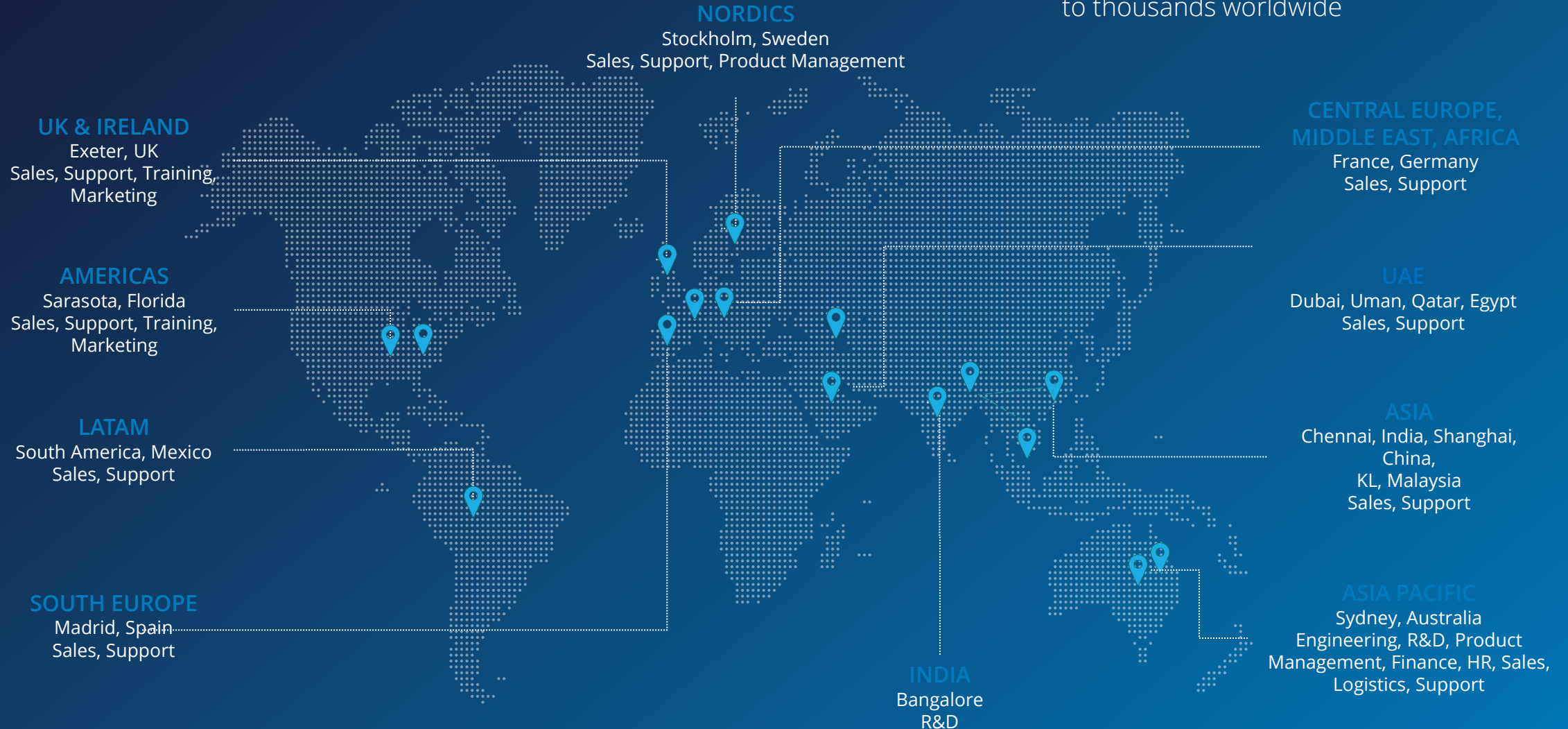
TAILORED INTEGRATED SOLUTIONS

- Focused on people's safety and well-being
- Cloud-based and on-premise security and business solutions
- In-house development for reliability
- Multi-area, multi-level access control
- OpenAPI for seamless 3rd party integration
- Collaborations with top-tier third-party partners

WHO IS PACOM?

GLOBAL PROTECTION FOR ALL

- Established in 1983, securing major banks
- 90,000+ global customer base
- Scalable security solutions from single sites to thousands worldwide



PACOM
VIGIL CORE™



ACCESS CONTROL



CCTV - LIVE &
RECORDED



VIBRATION
SENSORS



TIME &
ATTENDANCE



FIRE ALARMS



RULES MAPPING



WIRELESS
READERS



AUDIO
VERIFICATION



WIRELESS ALARMS



BIOMETRICS



INTRUDER
ALARMS



VISITOR
MANAGEMENT



POWER SENSORS



TEMPERATURE AND
HUMIDITY SENSORS



VIGIL CORE Solution

VIGIL CORE is the all-in-one platform that adapts to your unique needs, offering scalable cloud-based and on-premises options, cost-effective SaaS deployment, and AI-based features.

Unique in its class, VIGIL CORE stands out as the pioneering native cloud-based integrated intrusion, access control, and video system, seamlessly integrating building security and automation into a single, user-friendly experience.

Elevate efficiency, reduce costs, and secure lasting relationships. It's not just security; it's a futureproof business management tool.



VIGIL CORE

On-site Security

On-site devices

- Intrusion alarm
- Access control
- Video
- Audio
- Building automation
- Visitor kiosk

Cloud native software

- System management
- Alarm management
- Visitor management
- Building management

Apps for mobile use



VIGIL CORE

Solutions for Every Business



- ✓ Retail Shops
- ✓ Data Centers and Warehousing
- ✓ Transportation
- ✓ Banking
- ✓ Corporate Buildings
- ✓ Critical Infrastructure
- ✓ Utilities
- ✓ Telecommunications

VIGIL CORE

VAR Benefits

A streamlined, and cost-effective solution with seamless SaaS deployment. VIGIL CORE enhances efficiencies, reduces costs, boosts RMR, and allows for future scalability and growth. This solution provides a competitive edge while enhancing installation and maintenance efficiencies.

- Streamlined single complete solution for enhanced efficiencies
- Cost reduction in labor, hardware, and training expenses
- Seamless SaaS deployment with no need for specialized IT skills for installation or use
- Boost Recurring Monthly Revenue (RMR) through the SaaS model, fostering lasting relationships
- Scalable, flexible, and future-proof for long-term success
- Gain a competitive edge to secure more business
- Enhanced efficiency in installation
- Enhanced maintenance, identify and resolve issues remotely, rather than having to send a technician to the site
- System monitoring, know the status for your customers



VIGIL CORE

Enterprise Platform

The VIGIL CORE Platform is an intelligent, centrally controlled management platform, designed primarily for monitoring data from thousands of remote sites that make up a significant part of an asset base of any utilities, retail or banking organization.

- Built with latest web-based technologies
- IT friendly
- Hybrid cloud friendly, can run in the cloud and private networks
- Horizontal scalability, virtually unlimited IoT device connections
- Virtually unlimited redundancy
- High security using TLS 1.2/1.3
- Integrates video, audio, access, alarm, BMS over Modbus
- Intelligent dashboards and analytics
- OpenAPI - every function is accessible
- Fully supports PACOM IoT smart devices
- GPS tracking
- Visitor Management



VIGIL CORE

User Benefits

An all-encompassing, cost-effective, and future-proof solution with advanced features, ensuring accessibility, security, and streamlined operations.



Cost and Efficiencies

- Complete solution, minimizing integrating cost and enabling labor efficiencies
- Cost-effective SaaS solution
- Generates extensive ROI
- One complete platform for reduced training costs
- Cost-efficient upgrade path with existing PACOM GMS / EMCS system infrastructure

Future Proof

- Scalable and flexible, from a single site to thousands worldwide
- AI-based features offering solutions beyond security
- Additional features include IoT-sensors, building management, visitor management, and more
- Enable Business Operations synergies
- Single manufacturer with bespoke integration options
- Complies with the stringent requirements of EN 50131 G4 – highest security standard for intrusion in Europe

VIGIL CORE

User Benefits



Cloud-Based Solution

- Access anywhere, anytime using latest software, eliminating the need to maintain onsite servers
- Live scheduled updates, always getting the latest software
- Cyber-secure with continual version updates
- Web-based programming, no software installation or VPN required
- Remote diagnostics and maintenance
- Remote firmware upload with minimized downtime - dual memory for controller and devices

Technology

- Intuitive mobile app covering intrusion, access, and video management
- OpenAPI for seamless integration with other technologies
- Multi-factor authentication for improved security
- Customizable reports, rules engine, and macros
- Multi-location management for users, PIN codes, access rights, etc
- Mobile tech tools available for smartphones or tablets over Bluetooth

VIGIL CORE

Solution Overview



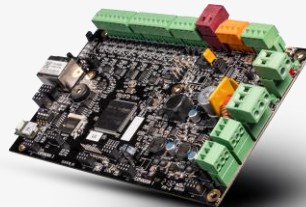
VIGIL CORE

Hardware and Software Overview

Suite of hardware and software solutions to support your enterprise-wide needs. All Hardware and Software IP is 100% PACOM.



SOFTWARE & Apps



CONTROLLERS



EXPANSION CARDS



PERIPHERALS

VIGIL CORE Software

- Dashboard
- Alarm
- Management
- Access

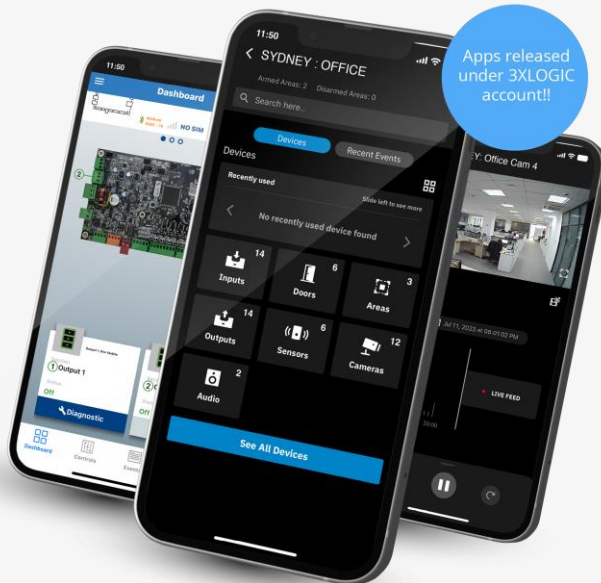


- Analytics
- Video
- Visitor
- Browser & App
- Integrations



VIGIL CORE

Mobile Apps



- Management App
- Event push notification
- Control intrusion - action alarms
- Live/playback VIGIL CLOUD camera/event video
- Control doors
- Control BMS events



Setup App

- Setup and commissioning
- Uses secure BLE connection
- Technician dashboard for system diagnostics

VIGIL CORE

Hardware

The PACOM IoT smart devices provide a cost effective, highly secure and user-friendly remote site solution for small stores up to large enterprise organizations.

- Fully designed and developed by PACOM
- Supports hybrid Intruder alarm, access, audio and BMS
- Designed for harsh environments
- Supports ethernet, Wi-Fi, 4G, 3G, 2G, CatM1, NBIoT, BLE
- Multiple redundant signalling paths over IP/4G including SIA/CID DC09 over IP
- High network security using SSL TLS 1.2/1.3, EN Grade 4



- Cloud native panel
- I/O expansions cards
- Multi-sensors for BMS & analog values
- Audio cards
- OSDP alarm verification camera
- And more...

VIGIL CORE

Hardware

S1000 Smart Controller

Manage Access Control, Alarms and Building Management functions remotely and securely when connected to the VIGIL CORE Platform.



Alarm Keypad

The Alarm Keypad has a 2-row display and number pad with 6 function buttons for user interaction. The Keypad is available with or without a multi-technology reader. The S1000 controller conforms to the OSDP standard, supporting wide range of card readers, biometric readers and PIN pads to select as needed.



Expansions Cards

Install up to three (3) expansion cards per S1000 Smart Controller for modular system configuration.



8 Input, 2 Output



6 Output



Cellular + GPS



Dual Ethernet



CRI Expansion



Audio Bus



RS485 serial
expansion

Field Equipment

Increase system functionality and capacity with specialized on-site modules.



Remote IO



MINIO (SD1-MINIO-PCB)



Card Reader
Interface



Audio Listen In



Remote Sensor



Mini Camera

VIGIL CORE

SaaS



VIGIL CORE

New Customers

Integrated video, audio, access, alarm, BMS
experience in scalable environment

SaaS subscription provision for end users:

- Remote multi-site management from browser and mobile
- Intelligent dashboards and analytics with multi-layer maps or simplified solution presentation
- Complete access control
- Building automation including environmental data - comprehensive reporting of alarms, access, temperature, humidity, energy data, etc
- SIA / CID DC09 alarms to selected SOC / ARC
- High security: MFA and TLS 1.2/1.3 communication
- PACOM core IoT field hardware utilizing OSDP for communication
- Visitor and alarm management functionalities
- Remote field device updates and management
- OpenAPI - every function is accessible

**Carefree,
managed and
monitored SaaS
Solution platform**

VIGIL CORE

Existing ARCO Dealer and Customer

- Option to upgrade to new version having new brand but supporting all existing features
- New features to Intrusion, access, BMS and visitor management (*)
- Support for VIGIL video (**)
- Option to use new mobile app(s) to utilize new services
- Apps can be downloaded:
 - PACOM VIGIL CORE Manager
 - PACOM VIGIL CORE Setup
 - Publisher of app is 3xLOGIC
- Old SPG apps remain functional but do not provide new services.

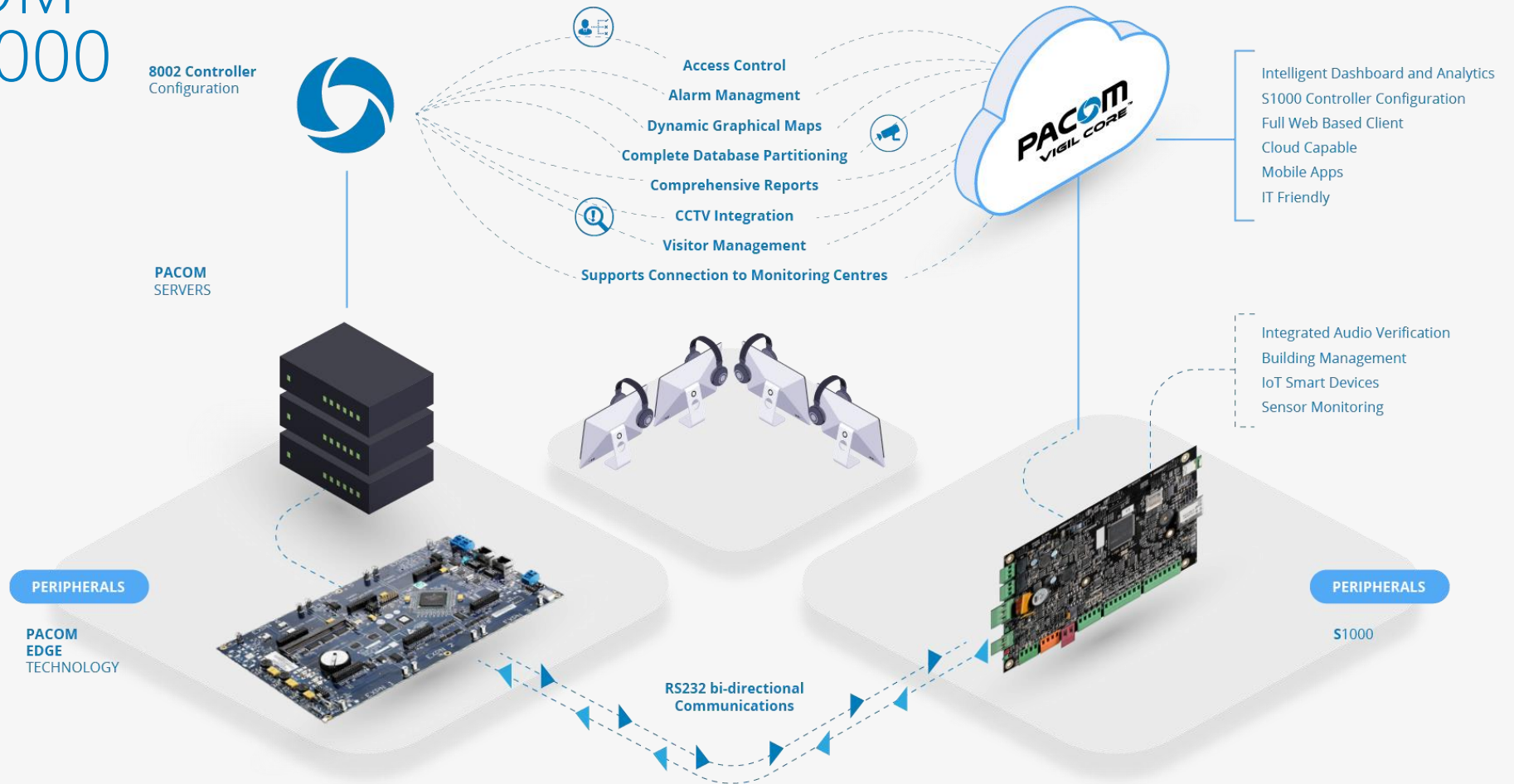
* Site details report, proof of system configuration. New features to dashboards, extensions to organization management and more, including fixes to known misbehaviours - Please refer Release note for further details

** Live view, playback, search, event video



VIGIL CORE

8002 PACOM GMS to S1000 Upgrade Supported Functions



VIGIL CORE

8002 to S1000 Integration Supported Functions



General

- Supports all current PACOM controllers (8002 series controllers) and peripherals
- All PACOM standard events are supported
- No need for GMS server application
- 8002 hardware configuration via GMS config tool

Intrusion

- All area mode change events and commands are supported
- All Input and output events are supported
- All PACOM standard commands are supported (inputs, outputs, areas and keypad)

Access Control

- Mapping of VIGIL CORE users, credentials and roles to PACOM cardholders
- Mapping of time schedules and calendars.
- Mapping of VIGIL CORE floor roles
- Mapping of all VIGIL CORE user properties to respective PACOM cardholder properties
- Door commands supported
- Floor commands supported
- User commands supported

Note: Integration will be available Q1 2024

VIGIL CORE

Value of the Cloud - VARs

Expanded remote diagnostics of panel

- Save time by not having to go to the site
- View and test battery
- View board temperature
- View live status of alarm points
- Test an alarm point to the central station
- Track problems such as wireless signal strength without a truck roll
- Remotely update firmware updates to all field devices from the web GUI
- Dealers authorized users can issue commands such as restarting the panel and arming from the web GUI dashboard widgets

Reduced traffic to the central station

Certain alarms can notify customers during the day (door propped, door forced, etc.), through the website or mobile application. And at night by a central station operator.

VIGIL CORE security management

- VIGIL CORE SaaS manages, maintains and collects the data of control panels at the customer premises, providing comprehensive reporting of events
- The control panel runs autonomously controlling devices, events and actions. In the event of cloud disconnection, data and events stored in the panel and updates conducted in the Cloud will be automatically updated in both directions
- Alarm events are sent directly from the control panel to the Alarm Monitoring Station using multiple paths and communication technologies
- Rapid activation of changes - changes to users, schedules, etc. are almost instant
- Work smarter by utilizing scheduling when alarms are managed by the customer themselves, and when they go to the Security Operating Center

- Reduce truck rolls and go back through remote troubleshooting
- More flexibility for programming and changes/updates
- Reduced traffic to Central Station
- Improved customer experience through real time system updates and reduction of downtime

VIGIL CORE

Customer Support and
Experience



Marketing Sales Support

We have case studies across a variety of markets from banking to finance to telecommunications. Learn how PACOM VIGIL CORE solutions have helped solve a variety of unique security challenges.

Banking
Finance And Leasing
High Security Facility
Telecommunications



Case Studies

- Across different verticals



Solutions Brochures

- Across different verticals

Marketing Sales Support



Sales Brochure
Remote site monitoring and management



Summary Data Sheet
High level solution overview



Tech Docs
Data sheets and install guides

Support

UK and Europe

European Support

- Sales Teams
- Sales Engineers
- Technical Support
- Distribution Center (DC)
- Marketing
- Training

- Sales
- Support
- Training
- Manufacturing
- DC

- Sales
- Support
- Engineering
- Training

European Support

- Sales Teams
- Technical Support
- Marketing
- Training

- Sales
- Support
- Training

- Sales
- Support
- Training

- Regional support
- Limited support

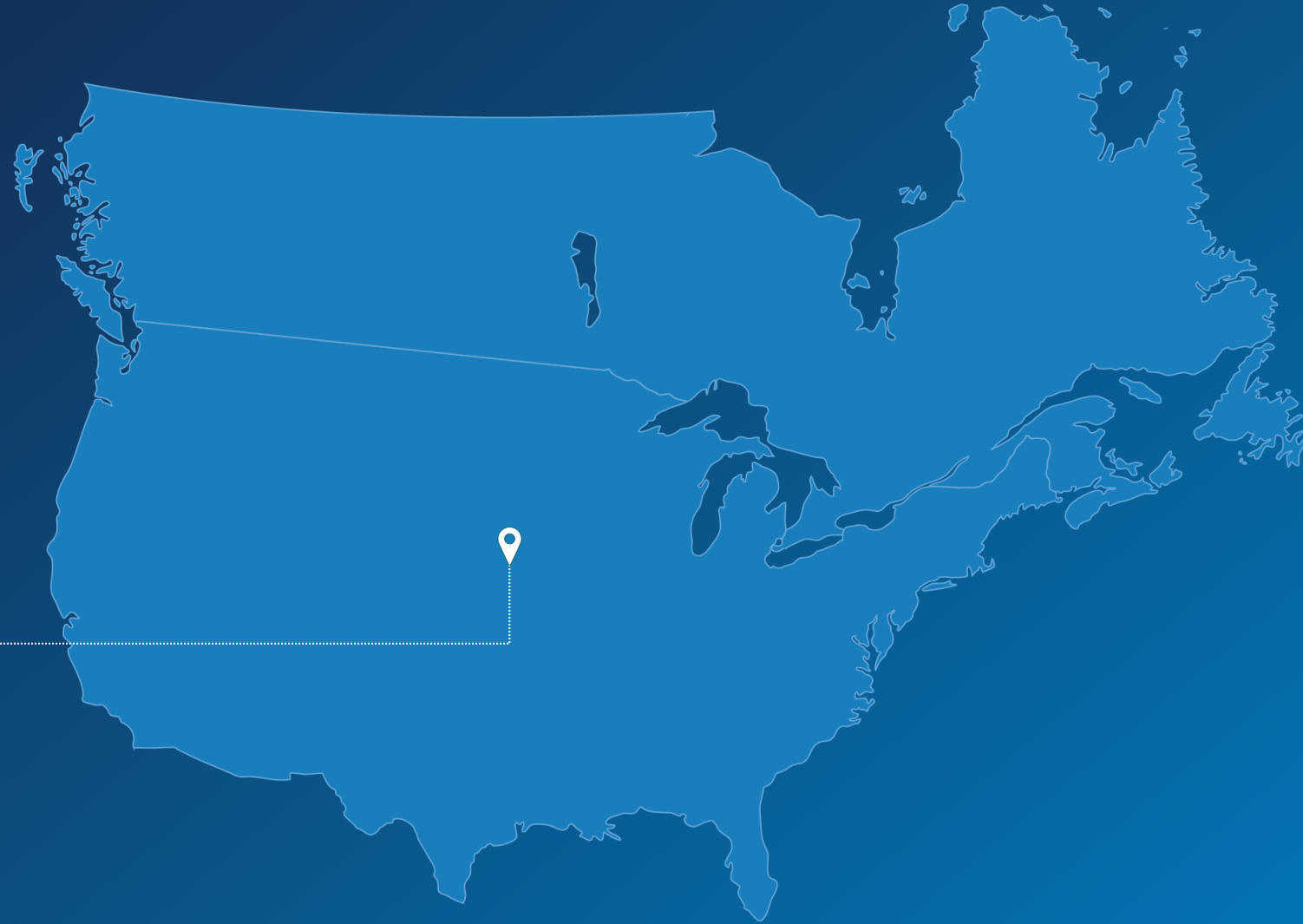


Support

North America

North American Support

- Sales Teams
- Sales Engineers
- Technical Support
- Distribution Center
- Marketing
- Training



christopher.jahnke@pacom.com (email is incorrect)

Support LATAM

LATAM Team

- Oscar Martinez BDM LATAM
- Carlos Herrera BDM Mexico
- Manuel Serna Tech and Sales Support and Training
- Sandra Toledo Inti ISM orders.americas@pacom.com
- Bilingual Support support.americas@pacom.com



Support

APAC

APAC Sales & Support

- Steve Barton
- Josh Empson
- Edmund Tan

Support & Pre-Sales

- Aayush Vats
- Paul Zheng
- Chan Kheng-woo
- Eloy Belo

We have Sales and Support in Australia and Malaysia.

We have Support only in Philippines.

PACOM HQ is Sydney.



Support



Sales Engineering

Contact your local / regional sales engineering team.

E-mail:

Product management will assist with larger projects/RFPs when needed. Requests for support will come through the sales engineering teams.



Technical Support

Contact your local / regional support team.

E-mail:

Product management will assist with prioritizing bugs and follow-up development and QA-teams when needed.



Feature Requests

Contact the product manager for VIGIL CORE.

E-mail:

Product management will do the initial feasibility study, and then work with the organization for prioritization and development.

Training Coming Soon



An isometric illustration of a cityscape with various buildings, including skyscrapers and residential blocks, situated on a curved surface that resembles a globe. The scene is set against a dark blue background with faint, glowing circular patterns and lines, suggesting a global or technological theme.

THANK YOU
Questions?

PACOM

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APPENDIX

VIGIL CORE



VIGIL CORE

Global Customers



- DGiF Tax Offices France
- BPCE Bank France
- Tokio Marine

- Secom Thailand
- Hebert Electricity
- Ohmtronic

- Eppy Consulting
- Business School Morocco
- Claro Telecom Columbia

- European Parliament
- Carpe Diem
- Pyramidion

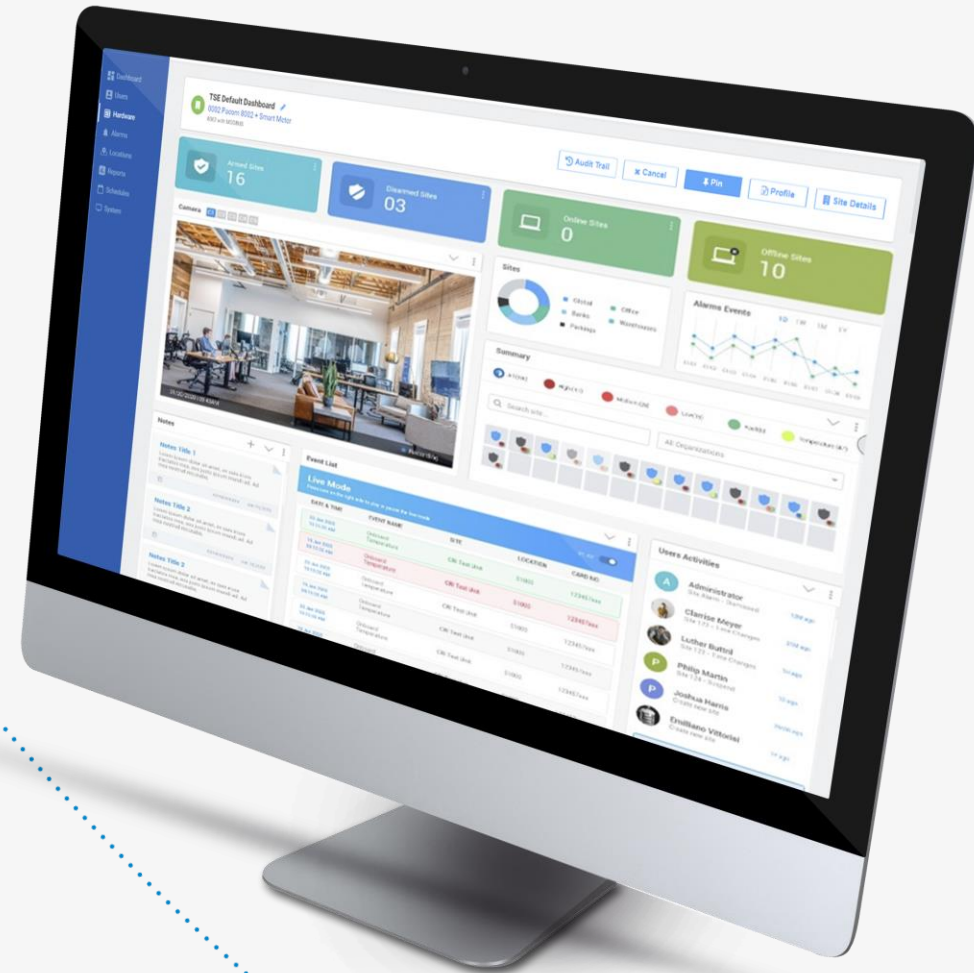
VIGIL CORE

Software components



VIGIL CORE Dashboard

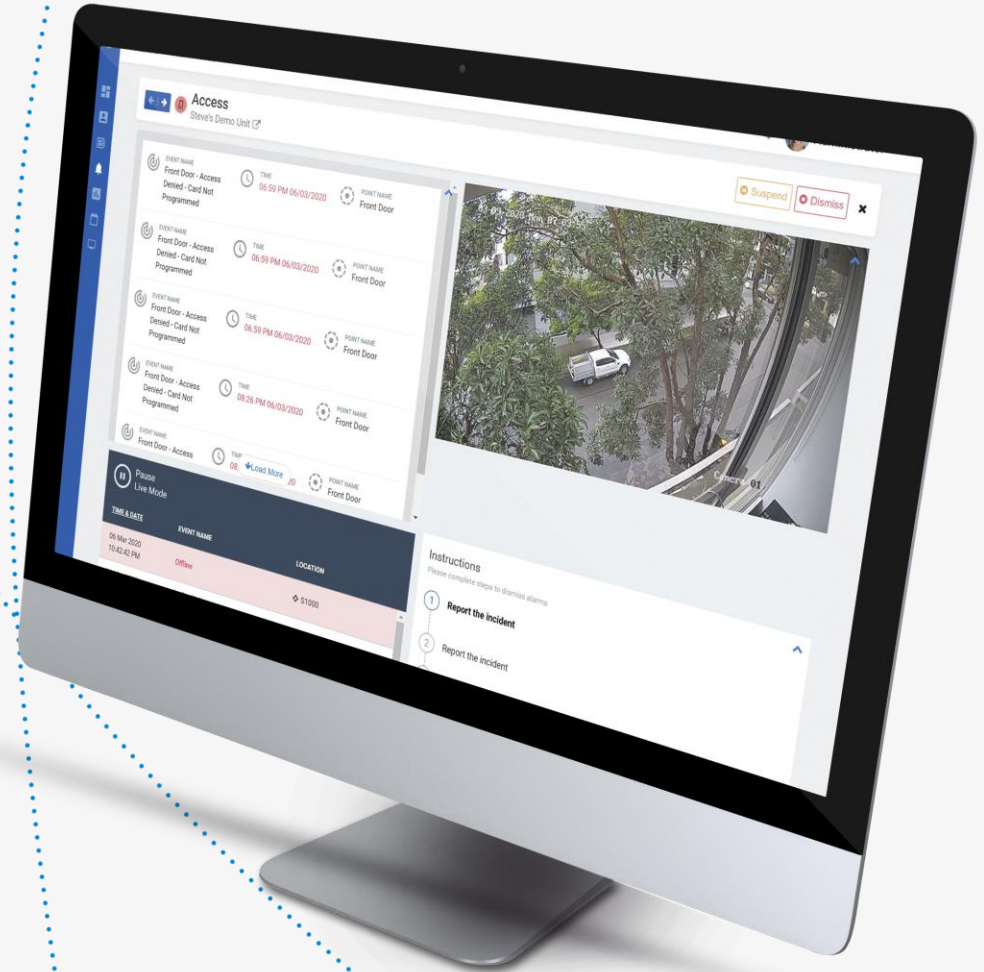
- Role based, only access what is relevant for you
- Customized widgets, enabling you to get the ideal dashboard for your needs
- Dark or light theme
- Real time updates
- Supports multiple languages



VIGIL CORE

Alarm Management

- Prioritized alarms
- Customized UI
- Live recorded video
- Linked to mobile app



VIGIL CORE

Access

- Role base access
- Multi credential types
- Biometric support
- Customized fields
- App Support



VIGIL CORE

Location Services

- GPS tracking
- Asset tracking
- User location tracking
- Access based on location
- Geo fencing



VIGIL CORE Analytics

- Monitoring health
- Trending analysis
- Alert triggers
- Scheduled reports



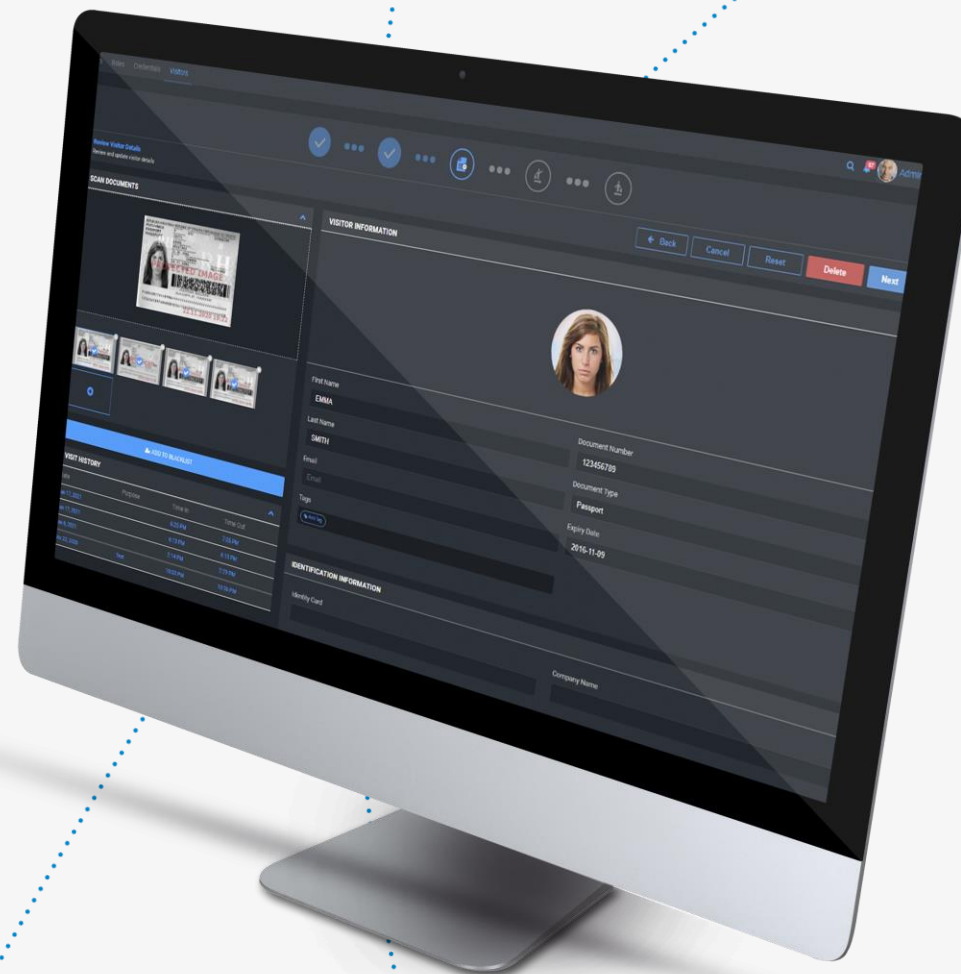
VIGIL CORE Video

- Live and recorded mode
- Event processing
- Video proxy mode
- Video viewed from app



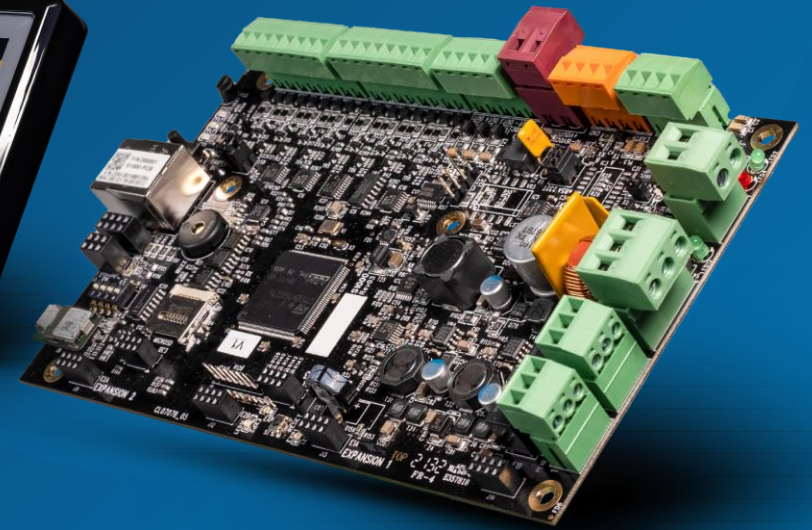
VIGIL CORE Visitor

- Customized UI
- Blacklisting
- Passport scanning
- Kiosk support



VIGIL CORE

Hardware components

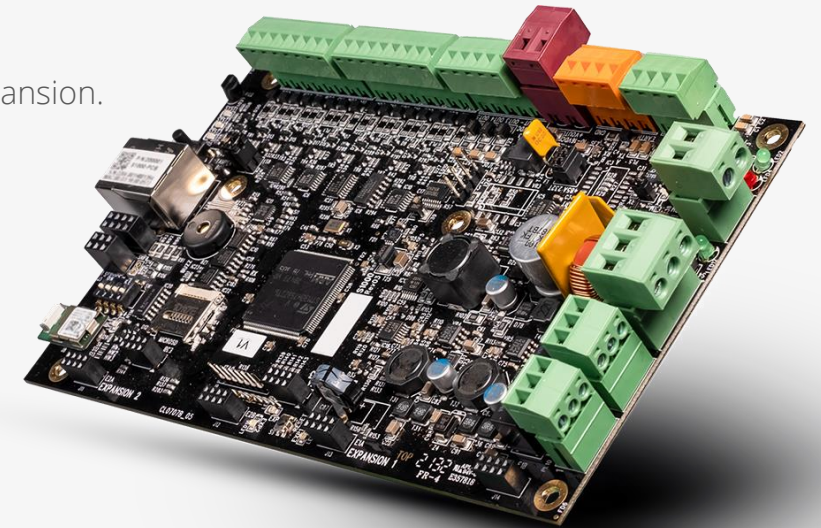


VIGIL CORE

Smart Hardware

The PACOM IoT Smart devices provide a cost effective, highly secure and user-friendly remote site solution for small stores up to large enterprise organizations

- Fully designed and developed by PACOM
- Supports hybrid Intruder alarm, access and BMS
- Designed for harsh environments
- Supports ethernet, Wi-Fi, 4G, 3G, 2G, CatM1, NBIoT, BLE
- Multiple LAN/WAN redundant paths
- High network security using SSL TLS 1.2/1.3
- Full remote configuration and control
- Low entry cost, “pay as you grow” plug and play modules for expansion.
- AI capable - programmable logic rules
- EN Grade 4



VIGIL CORE

Sensor Remote Expansion Device

The VIGIL CORE Sensor interface card provides an easy expansion for an S1000 controller to provide analogue sensing information to be collected by the S1000 controller and then used to make local decisions as well as to pass to VIGIL CORE platform for logging.

- Monitor environmental conditions of an area
- All sensors can report alarms based on programmable thresholds
- Real time light levels
- Real time temperature and humidity
- Real time movement
- Real time vibration
- 2 analog or digital inputs software programmable
- 1 relay output or analog output software programmable
- Supports OSDP communication protocol (up to 1000m)
- Optional real time air pressure
- Optional Smoke detection
- Optional hazardous gas detection
- Optional IR controller



VIGIL CORE

Mini Camera Expansion Device

The VIGIL CORE Minicam provides an easy expansion for an S1000 controller to provide Video snapshots to be collected by the S1000 controller and then passed to VIGIL CORE Platform for logging.

- Ruggedized housing
- Can work in high temperature
- Small footprint (50mm x 65mm x 18mm)
- Hi resolution images
- Supports OSDP (up to 1000m)
- IR illumination for night shots
- Captures images to Smart Controllers SD card
- Battery backup power from Smart Controller

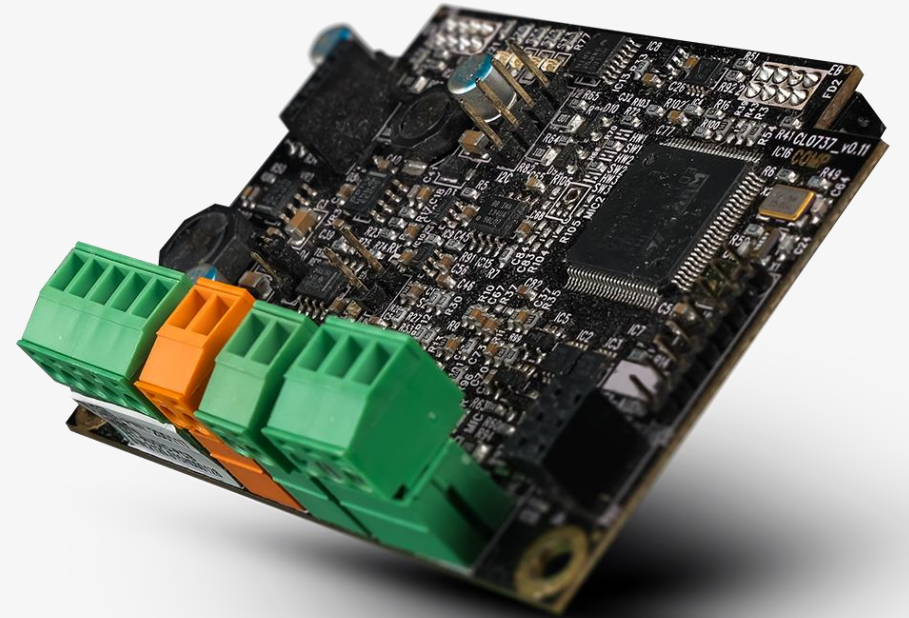


VIGIL CORE

Audio Expansion Device

The VIGIL CORE Audio Expansion card allows for either a single microphone and speaker to be added for listening and speaking, or can be expanded to support up to 8 remote speaker and microphones via the OSDP bus

- Support for up to 8 microphones
- Support for up to 8 speakers
- Audio file capture on alarm
- Audio thresholds to detect loud noise
- Playback pre-recorded message on speaker
- Auto card detection on S1000

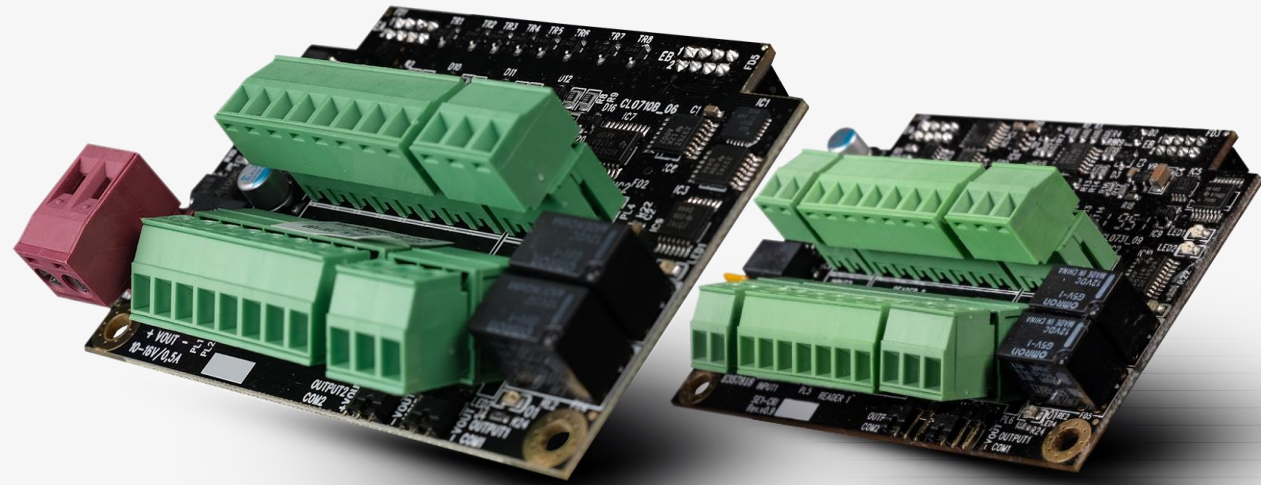


VIGIL CORE

IO and CRI Expansion Device

The VIGIL CORE 8 Input 2 Output expansion card provides easy expansion for an S1000 controller, an additional 8 analog / digital inputs and 2 relay outputs can be added to the S1000 base board. Also available is the 6 output card and card Reader interface.

- 8 analog or digital Input software programmable
- 2 relay outputs (or 6 relays on the output card option)
- Auxiliary supply output
- Multi-state monitoring of digital inputs
- Full door control CRI expansion card – 2 Wiegand readers



VIGIL CORE

Biometric Integration

VIGIL CORE supports biometric readers and standard readers using OSDP encrypted communications or using Wiegand signaling. Support for time attendance.

Full integration to VIGIL CORE for reader's biometric face templates to allow enrollment, monitoring and reporting.

Full integration to VIGIL CORE visitor management.

- Touch display facial recognition
- Fingerprint readers
- Card reader function supported
- IP integration to VIGIL CORE
- Supports Wiegand
- Thermal detection



VIGIL CORE

Solutions for Every Business

- ✓ Retail Shops
- ✓ Data Centers and Warehousing
- ✓ Transportation
- ✓ Banking
- ✓ Corporate Buildings
- ✓ Critical Infrastructure
- ✓ Utilities
- ✓ Telecommunications



VIGIL CORE

Banking and Retail Solutions

We provide access control, alarm, video surveillance, environmental monitoring such as power supply, air conditioning control, temperature and humidity and hazardous gas/smoke detection.

- Remote configuration and control
- Access control and visitor management
- Alarms & theft monitoring
- Environmental monitoring and control
- Power supply monitoring
- Warehouse protection and monitoring
- Video / audio security monitoring

Corporate buildings/malls

- Access/biometrics
- Alarms and BMS
- Video
- Visitor management

Warehousing

- Access
- Alarms and BMS
- Video
- Asset management

Retail shops/branches

- Access
- Alarms and BMS
- Video
- Asset management

Transportation

- Access
- Alarms and BMS
- Video/audio
- Tracking



VIGIL CORE

Data Centers and Warehousing Solutions

We provide access control, alarm, video surveillance, environmental monitoring such as power supply, air conditioning control, temperature and humidity and hazardous gas/smoke detection.

- Remote configuration and control
- Access control and visitor management
- Alarms & theft monitoring
- Environmental monitoring and control
- Power supply monitoring
- Equipment room protection and monitoring
- Video / audio security monitoring

Buildings/Data Centers

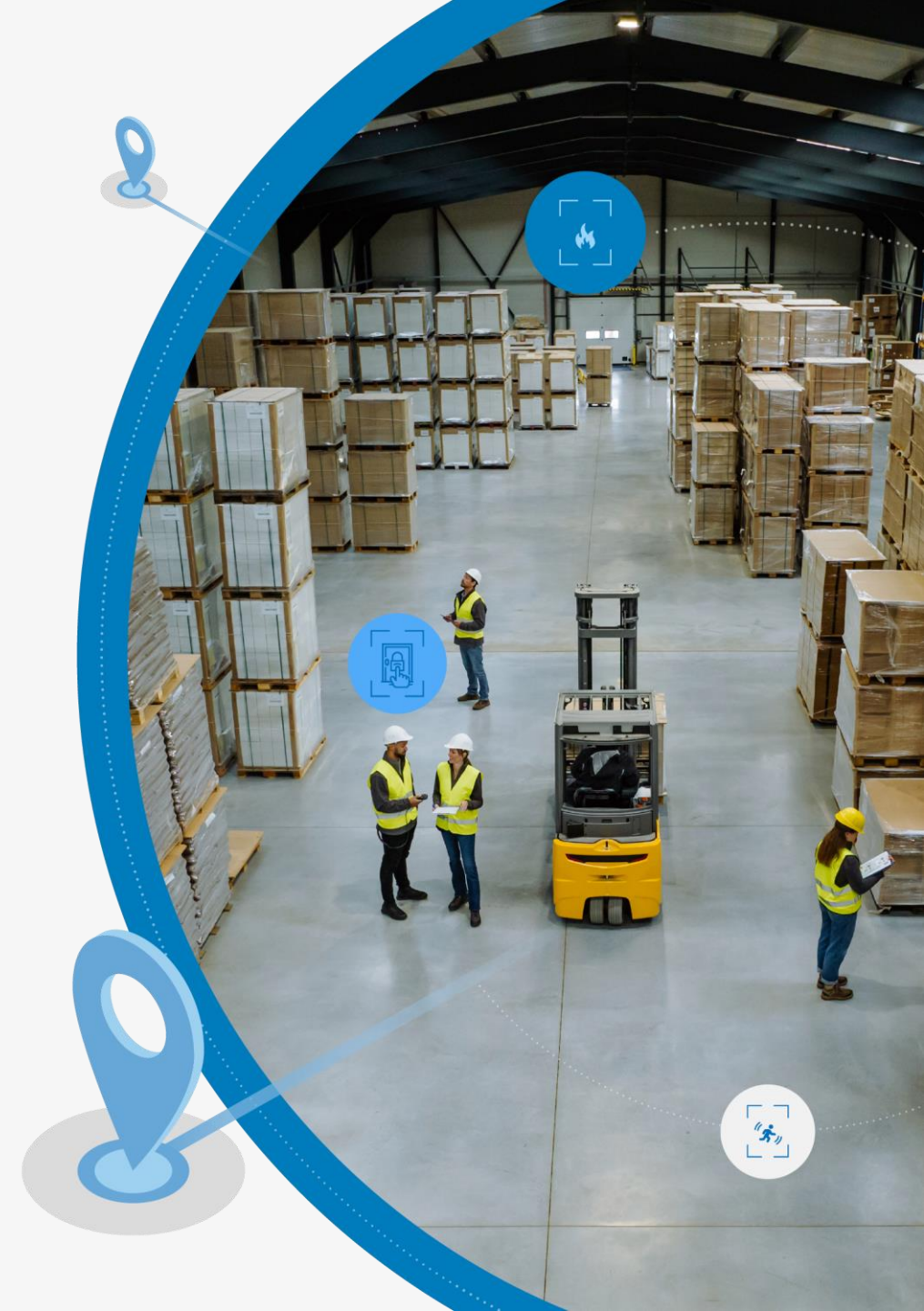
- Access/biometrics
- Alarms and BMS
- Video
- Visitor management

Cell Towers

- Access
- Alarms and BMS
- Video
- Asset management

Cabinets

- Access
- Alarms and BMS
- Video/Audio



VIGIL CORE

Banking Upgrade

Migrate legacy panels to VIGIL CORE

- Legacy banking panels installed for over 10 years
- Most install base of legacy is Europe and Americas
- Competition would rip and replace using DMP and Honeywell – a high cost
- Existing software is not cloud or IT friendly – a cyber risk
- Lack of innovation and clear roadmap timetable for legacy manufacturers
- VIGIL CORE offers an affordable and advanced solution today
- Option to upgrade legacy system when it fails at a low cost
- Add new VIGIL CORE features such as BMS, audio, video to enhance legacy system



VIGIL CORE

Retail

ROI Operational Savings

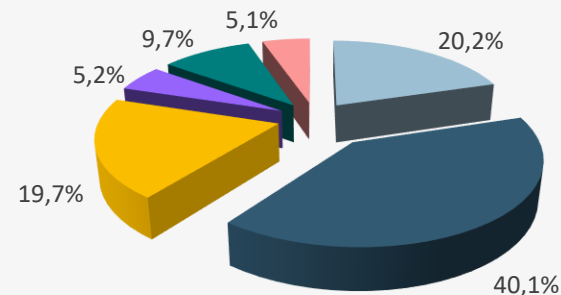
- Shrinkage is increasing YOY
- Internal theft increased after Covid-19, rapidly getting closer to shoplifting value globally
- Energy costs account for 15% of a stores operating budget
- Appropriate staffing levels to maximise transactions and reduce overtime
- CCTV and monitoring energy consumption and inventory ROI within 2 years
- Monitoring of 1000 smart shops - \$1,000,000 plus cloud subscriptions \$150,000

Staffing appropriately is an important sales driver:

- 4 out of 5 American shoppers have left a store due to long lines
- 73% of sales are lost when a checkout line is abandoned
- 64% of American consumers shop online to avoid long lines

Source: Evolving Retail: How digital is shaping the future of brick & mortar stores, Ayden, 2017

Convenience Store Power Consumption



- Refrigeration
- Air Conditioning
- Lighting
- Elevator
- Kitchen
- Other

Retail Shrink Averages

FY 2019	1.62%
FY 2018	1.38%
FY 2017	1.33%



VIGIL CORE

Utility

- Alarm status
- Battery availability – potential to fail
- Cell throughput/signal
- Copper theft
- Damage to facility – e.g. flooding
- Diesel availability/theft
- Optimal source of energy
- Perimeter breach
- Remote control
- Temperature and humidity – in/out
- Tenant specific energy consumption
- Who entered the building and when they were in/out

Typical annual down time savings based on 5000 locations (cell towers or cabinets) = USD700K

NUMBER OF SITE - CELL DOWN INCIDENTS PER MONTH	DOWNTIME AVOIDED PER MONTH WITH TELEMGMT (Hours)	VOICE TRAFFIC LOSS AVOIDED PER MONTH (Erlangs)	DATA TRAFFIC LOSS AVOIDED PER MONTH	REVENUE LOSS AVOIDANCE PER MONTH	FIELD VISIT COST AVOIDANCE	TOTAL SAVINGS ANNUALIZED
1000	1050	57750	1050	13690.425	45000	704285



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Thank You