

sec^omea

Remote Access for Industrial Equipment

The world's first security-certified remote access solution



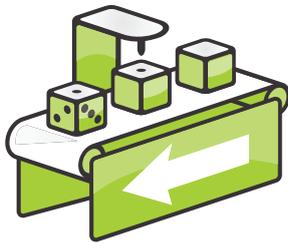
ENGINEERING THE FUTURE WITH YOU

The fourth industrial revolution is upon us, and it's an exciting time for machine builders and engineers of all disciplines and industries. They're hard at work readying their companies and their customers for a completely digitized and automated future – otherwise known as the Industrial Internet of Things (IIoT) – and so are we.

An IIoT solution for any segment

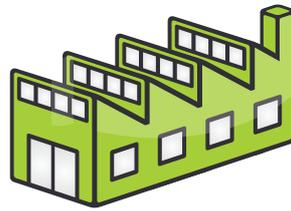
Whether you build machines for commercial industry or for public utility, the Secomea solution can meet your needs. Our customers work across almost every sector from Food and Beverage and Textiles to Packaging, Printing and Pharma. We also serve public customers in Water, Energy, Building Automation and more.

Whatever your automation challenge, Secomea has a solution.



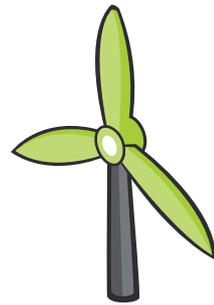
Automation

Food and Beverage
Material Handling
Pharma & Medical
Packaging
Printing



Factory

Industrial Infrastructure

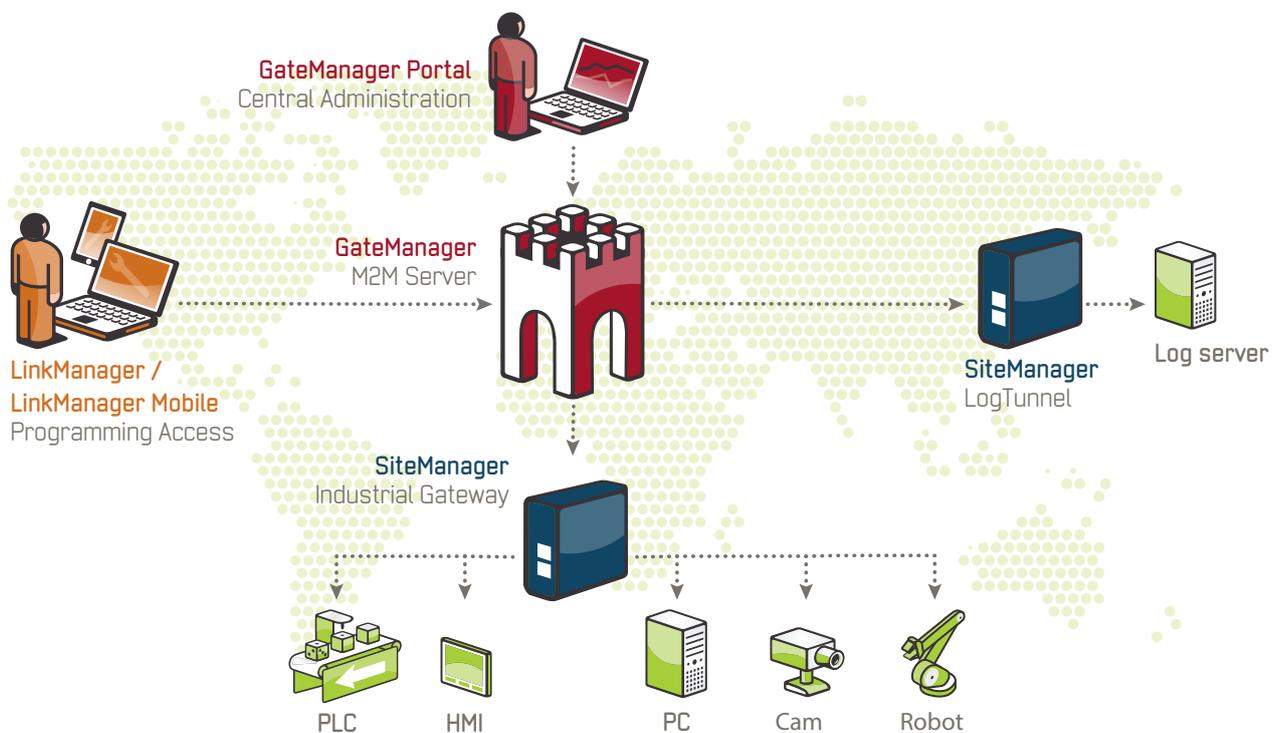


Utility

Water and Energy
Building Automation

THE SIMPLEST, MOST SECURE REMOTE-MANAGEMENT SOLUTION

The Secomea solution allows machine administrators to provide remote programming, monitoring and data logging of their customers' machines. Designed for users with no IT or networking knowledge, the solution comprises 3 basic components that provide secure communication between the machine administrator and the machine, no matter where it is in the world.



SiteManager™

Placed at the factory (hardware or software)

LinkManager™

Web- or Windows-based client for the engineer or end user (for desktops and mobile devices)

GateManager™

M2M server that ties together the SiteManagers and LinkManagers (Cloud-based or stand-alone)

SECURITY IS PRIORITY #1

The simpler the solution, the more likely it is to be operated as intended, keeping security firmly intact. The simplicity of the Secomea solution uniquely supports and strengthens the security that's built right into the solution as first priority.

- Strong end-to-end encryption
- Two-factor and three-factor security authentication
- Event audit trails
- Role-based account management
- Standard measures for eliminating risk of vulnerabilities resulting from mal configuration or human carelessness



The world's first security-certified remote access solution

Secomea was the first remote access solution in the world to be officially security certified. The esteemed German security organization **ProtectEM GmbH**, which works in close cooperation with the Deggendorf Institute of Technology, performed our security audit based on the following framework:

- Auditing processes according to NIST SP800-115 & ISECOM OSSTMM
- Concept auditing based on BSI (German federal office for information security), ISA 99, and IEC 62443
- Component auditing by individual component analysis and stress testing
- System auditing where end-to-end security was thoroughly assessed



Industry 4.0 enablers

Based on Reference Architecture Model Industrie 4.0 (RAMI 4.0) with reference to IEC/PAS 62443-3, ProtectEM has certified Secomea products as Industry 4.0 enablers.

To view our security audits and certificates in full, go to secomea.com.



ONE OF THE TOP-SELLING SOLUTIONS IN THE INDUSTRY

Developed specifically for the automation industry, the Secomea solution is used by machine builders and system integrators all over the world. As one of the industry's top-selling solutions, Secomea is suited to both smaller machinery installations with low budgets and larger machine installations that require immediate action.



The Secomea solution can provide remote access to any type of industrial device, and it is endorsed by leading PLC and HMI manufacturers.

A UNIQUELY FLEXIBLE AND SCALABLE M2M SOLUTION

Secomea's modular design makes it easy to ensure scalability for your customers' future process optimization and maintenance needs.

Machine administrators can easily provide:

▶ **CORRECTIVE M2M IIOT**

CUSTOMER CALLS WITH AN ISSUE AND THE SPECIALIST CONNECTS TO FIX OR DIAGNOSE. ESPECIALLY CONVENIENT IN THE FIRST PERIOD WHERE THE EQUIPMENT IS UNDER DELIVERY WARRANTY AND THE CALIBRATION PERIOD.

▶ **PREVENTIVE M2M IIOT**

SERVICE PARTNERS REGULARLY LOG IN AND CHECKS THE STATUS OF THE EQUIPMENT, OR MONITORED STATUS REGISTERS ARE LINKED TO ALERTS SO TECHNICIANS CAN TAKE ACTION BEFORE THE CUSTOMER CALLS.

▶ **PREDICTIVE M2M IIOT**

ALL DATA ARE COLLECTED, AND CRUNCHED IN A CENTRAL SYSTEM FOR REVEALING PATTERNS AND PREDICT TRENDS. THIS ENSURES UP-TIME AND ALLOW SUPPLIERS TO IMPROVE AND OPTIMIZE EQUIPMENT.

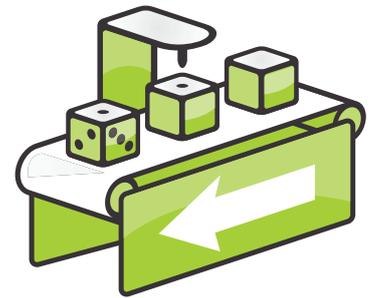
Secomea - Leading the way in IIoT

Secomea is a privately held company based in Denmark with offices and distributors located all over the world. Since 1999, we have been developing remote monitoring and management solutions for manufacturers and driving what we know today as Industry 4.0.



AUTOMATION

For machine providers and system integrators that need to fulfill service obligations for machine installations, Secomea is an extremely cost-efficient solution. With Secomea, you can diagnose and program the PLC or HMI device using the native software – just as if you were on site.



- Deployable and maintainable by non IT people
- Transparent programming and diagnostics access to any PLC, HMI etc.
- Mobile/tablet access to Machine interface



- Certified to secure your customers' factory and office network
- Industry 4.0 compliant differential user access management
- Cloud or private M2M server complying with "total privacy" policies



- Consolidation of all existing remote access solutions into one
- Simple provisioning by using the same configuration for all machines
- Multiple access methods via Ethernet, WiFi and cellular 3G/4G



- Data logging access for preventive and predictive maintenance
- Facilitates IoT Big data cloud storage connections
- Extends SCADA system securely over the Internet

“ We have customers in many different time zones and using Secomea allows us to diagnose problems while a customer sleeps. Being able to reduce, if not prevent downtime in this way really enhances our customer support. ”

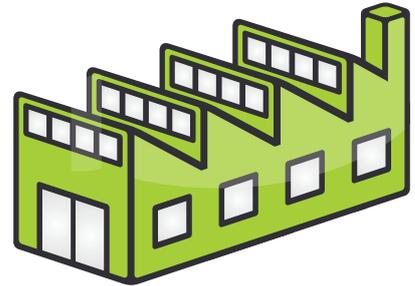
Ian Morgan, Service and Support Manager, Singer Instruments

“ The Secomea configuration and activation is simple and quick, and our machines that are scattered all over the world can be accessed from anywhere by our technicians that are constantly on the move. It just requires an internet connection, unlike using VPN connections that are often blocked. ”

Gerhard Mayrhofer, Head of Automation, Langzauner

FACTORY

Secomea can be used to proactively prevent machinery maintenance and downtime. Your customers can securely access PLCs and HMIs via their mobile devices, allowing them to make their operations faster and easier.



- Certified to secure your customers' factory and office network
- Industry 4.0 compliant differential user access management
- Cloud or private M2M server complying with "total privacy" policies



- Deployable and maintainable by non IT people
- Transparent programming and diagnostics access to any PLC, HMI etc.
- Mobile/tablet access to Machine interface



- Data logging access for preventive and predictive maintenance
- Facilitates IoT Big data cloud storage connections
- Extends SCADA system securely over the Internet



- Consolidation of all existing remote access solutions into one
- Simple provisioning by using same configuration for all machines
- Multiple access methods via Ethernet, WiFi and cellular 3G/4G

“ Secomea’s GateManager control makes it easier to conduct maintenance in every facility. All devices and remote users are defined in the GateManager so that workers don’t need to remember remote connection settings on each device separately. Secomea’s unique SiteManager Agent functionality gives remote users rights for defined locations while keeping the rest of the factory network safely closed. ”

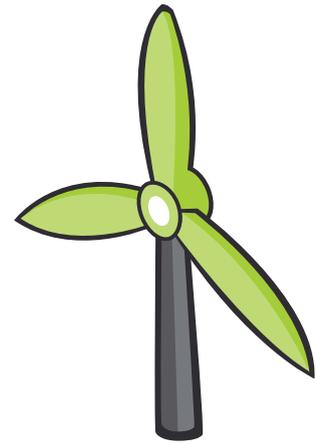
Tomi Airo, CIO, Consolis Parma

“ Simply put, to us, the Secomea solution means minimum administrative effort combined with maximum flexibility and security ”

Manuel Kluibenschädl, IT Administration, Thöni Group

UTILITY

When you want to offer your customers predictive maintenance services by logging machine data to a central surveillance center, Secomea is the right solution. It keeps you independent of remote network configuration, allowing you full control. If an issue occurs, you can connect to the equipment for further diagnostics, programming and upgrades.



- Data logging access for preventive and predictive maintenance
- Facilitates IoT Big data cloud storage connections
- Extends SCADA system securely over the Internet



- Consolidates all existing remote access solutions into one
- Simple provisioning by using the same configuration for all machines
- Multiple access methods via Ethernet, WiFi and cellular 3G/4G



- Deployable and maintainable by non IT people
- Transparent programming and diagnostics access to any PLC, HMI etc.
- Mobile/tablet access to Machine interface



- Certified to secure your customers' factory and office network
- Industry 4.0 compliant differential user access management
- Cloud or private M2M server complying with "total privacy" policies

“ The Secomea solution's biggest advantage is its ease of installation. If there is an existing network, you just plug the SiteManager in, and if not, it automatically uses the 3G network. This means we have focus on our core business, and do not have to spend time on IT. ”

Claus Herup, BMS Project manager, SE Big Blue

“ For global connections with our web-based system controllers we use the Secomea solutions through our own GateManager server. Secomea offers remote infrastructure, remote data logging, remote controlling and remote programming and secure your machinery and industrial equipment high performance and standards. ”

Harrie Bouwhuis, CEO, BRControls

THE COMPLETE SECOMEIA STARTER PACKAGE

Get up and running in only 15 minutes

The Secomea Starter Package makes it quick and easy to kickstart your remote access experience. Available in both a SiteManager hardware or software version, it's all you need to get going – and you'll be online in only 15 minutes.

Need help getting started?

Not sure how to put your Starter Package together? Get in touch with your local Secomea distributor to discuss your needs. Make your selection today and remotely connect tomorrow – it's that simple.

BUILD YOUR OWN STARTER PACKAGE



LinkManager
Floating license



GateManager
BASIC Account

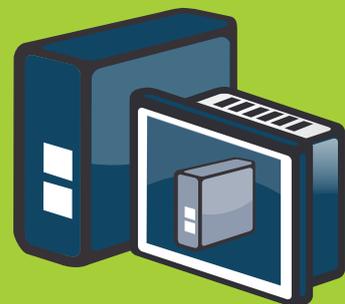
Completely customizable and scalable

The Starter Package includes:

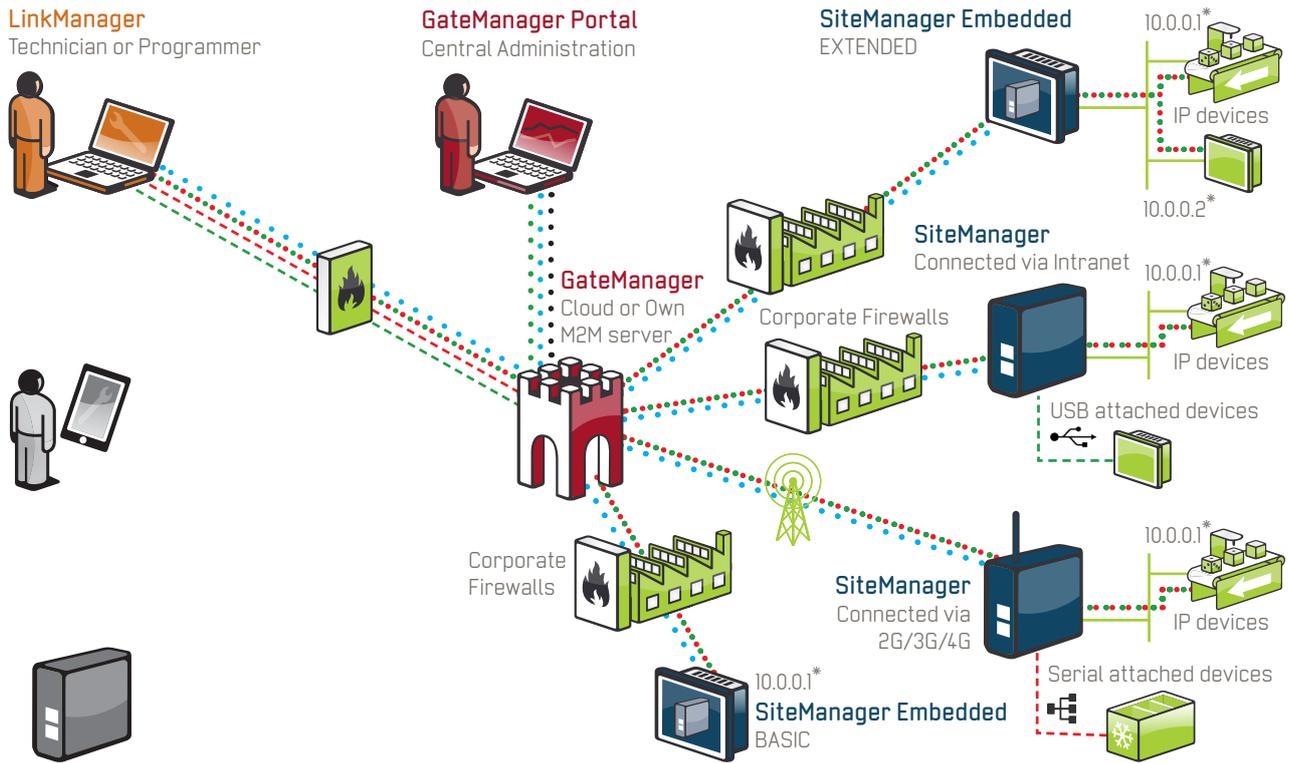
- ▶ SiteManager Gateway – Choose a SiteManager hardware model with your preferred Internet connectivity method, or the SiteManager Embedded software for installation on your Windows or Linux device.
- ▶ GateManager BASIC – Provides administrator capabilities on a Secomea-hosted GateManager server.
- ▶ LinkManager floating license – Provides your technical staff with full programming access to all your industrial equipment.
- ▶ LinkManager Mobile license – Provides easy access to web-enabled equipment or remote desktop/VNC from a web browser on your PC, tablet or mobile phone.
- ▶ EasyService FREE license subscription – Includes free phone and email support for your startup. (Allows connection of up to 100 SiteManagers, 2 LinkManager floating licenses, 8 LinkManager Mobile licenses and an unlimited number of LinkManager users.)



LinkManager Mobile
Single license



SiteManager
Gateway



- HTTP/HTTPS/VNC/RDP connections
- IP connections (UDP/TCP)
- Virtual COM connections (RS232, MPI etc.)
- USB redirect connections

- Local Ethernet network
- Device Administration / Configuration
- User Access Management
- * All remote networks can have identical IP subnets

HAAS MEINCKE SHARPENS ITS COMPETITIVE EDGE

Based in Austria, Haas-Meincke is a leading provider of baking production lines worldwide. The machines are so advanced that servicing can only be performed by Haas-Meincke engineers. As part of their service contract, engineers must be available during the burn-in period.

Secomea helps Haas-Meincke deliver on their services in the speediest, most cost-efficient way. The first Secomea SiteManager unit installed enabled remote access to four systems in Colombia. That saved four on-site visits of up to three weeks – the engineers never left Europe, but made all programming changes to Siemens PLCs remotely.

The Secomea SiteManager is now a standard component in every machine Haas-Meincke ships. Today 400 SiteManager units are installed in their baking machines and production lines globally. They have enabled Haas-Meincke to increase their customers' uptime and use remote access as a distinct competitive advantage.



FRANZ HAAS ■ MEINCKE ■ MONDOMIX ■ STEINHOFF

DISCOVER IN DETAIL

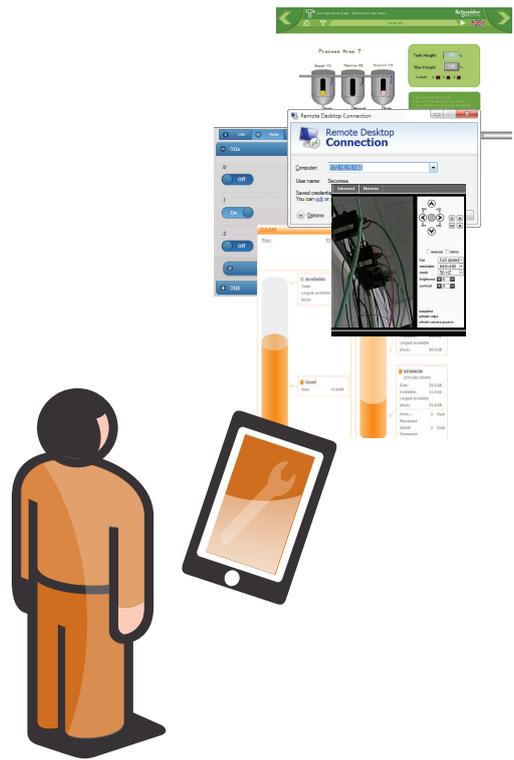
LINKMANAGER MOBILE

Remote access from anywhere

LinkManager Mobile allows users to remotely access equipment via their iPhone, iPad or Android devices. It is designed for accessing graphical interfaces on PLCs, HMIs or Webcams, for example. It also establishes connections to desktops running Linux or Windows. You simply connect to the device with LinkManager Mobile and you can start a VNC or MS Remote Desktop Client (RDP) and remotely control the device.

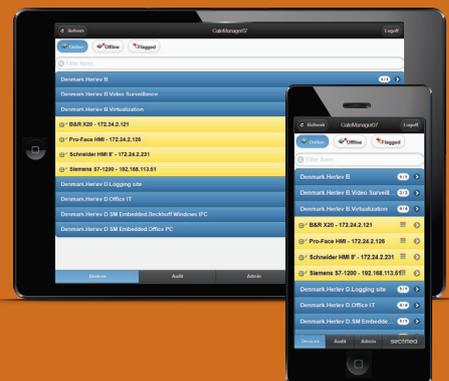
Scalable licensing

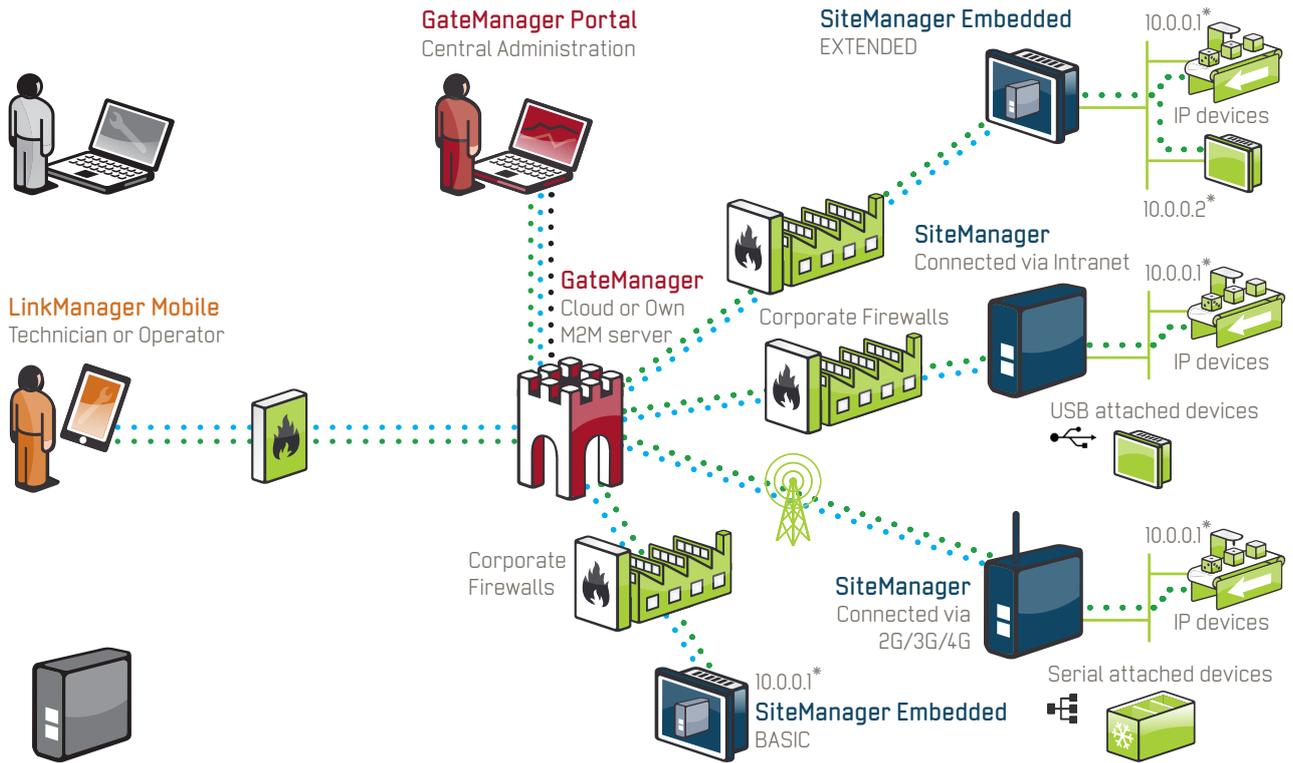
User accounts for LinkManager Mobile can be freely created in the GateManager Portal – part of the Starter Package. User accounts allow monitoring of equipment status and viewing of event logs. Applying a LinkManager Mobile license to the account will further allow you to connect to the equipment's user interface and remote desktop.



LINKMANAGER MOBILE KEY FEATURES

- ▶ Operated from any platform with a browser
- ▶ Supports PCs, iPhones, iPads and Android devices
- ▶ Access to web-enabled devices
- ▶ Access to Remote Desktop (VNC/RDP)
- ▶ Access for selected handheld APPs





..... HTTP/HTTPS/VNC/RDP connections

———— Local Ethernet network

..... Device Administration / Configuration

..... User Access Management

* All remote networks can have identical IP subnets

ELTECHNO ACHIEVES ULTIMATE FLEXIBILITY AND OPERATIONS EFFICIENCY

ELTECHNO offers tailored ventilation solutions as well as consultancy, installation, construction and programming services for process and machine control systems. They adapt to their customers' desires in terms of component choice and operator tools. One focus area is water treatment utility installations, controlled by Siemens PLCs extended with a web-based operator interface, and combined with Schneider Electric IGS SCADA software for accumulating and processing data.

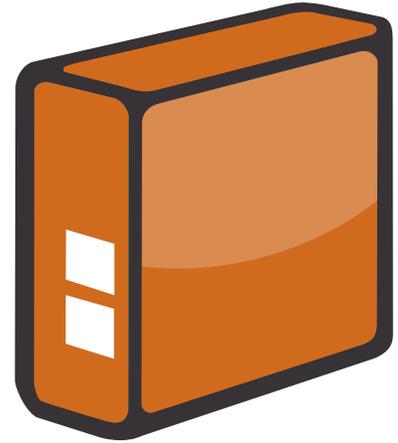
ELTECHNO uses SiteManager for both remote access and as an SMS Gateway for alerts generated by the PLC. LinkManager Mobile is used for accessing both the PLC operator interface and the SCADA system

via Remote Desktop. LinkManager Mobile is platform independent, so customers can use their PCs, tablets or smartphones for secure remote access. ELTECHNO has the overall responsibility for the installation and can remotely program and diagnose the Siemens PLC with the Step 7 software using the Secomea LinkManager Windows software.



DISCOVER IN DETAIL

M2M IIOT DATA COLLECTION



Secomea LogTunnel

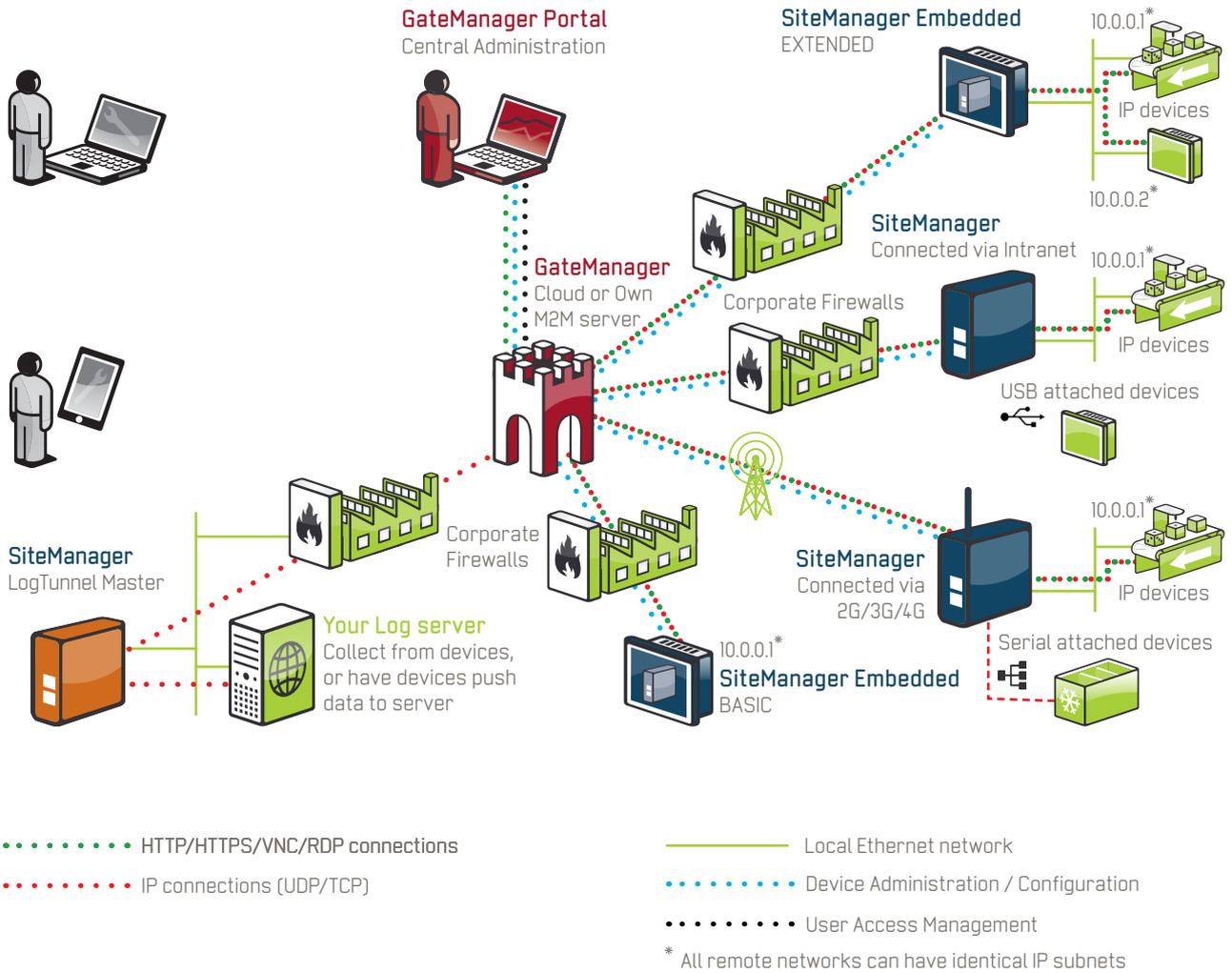
Secomea's unique LogTunnel technology is based on intuitive drag 'n' drop configuration and is completely transparent to IP networks and firewalls, for both the central site and the remote locations. That means anyone can use it – without involving any IT departments – and your LinkManager access is unaffected. LogTunnel is designed so that non-IT people can easily set up a complete secure infrastructure for central logging, for example, to a central SCADA system or OPC server.

The Technical Details

LogTunnel is based on a SiteManager in the central log server end that functions as a LogTunnel Master, while remote SiteManagers function as LogTunnel Clients. The LogTunnel Master can be configured to act as either "Pull" Master, or "Push" Master. In Pull mode the log server is the active part that connects to the devices and collects information. In Push mode, the log server is the passive part, to which the devices will actively deliver data. Both modes can, however, easily be combined.

ADVANTAGES OF *LOGTUNNEL* OVER OTHER SOLUTIONS

- ▶ Available for both software and hardware SiteManagers
- ▶ Setup by simple drag-and-drop in the GateManager portal
- ▶ No routing, firewall or tunnel configuration is required
- ▶ Corrective maintenance access (LinkManager) is supported concurrently
- ▶ No need for public addresses exposed on the Internet
- ▶ No dependency on static IP addresses
- ▶ No problem with conflicting IP subnets at remote sites
- ▶ Data usage is logged centrally on the GateManager
- ▶ LogTunnel allows full data tunneling for optimum freedom



FLSMIDTH MAKES THE SECURE, SIMPLE, SCALABLE CHOICE

FLSmidth is a leading supplier of equipment and services to the global cement and mineral processing facilities, including services before, during and after construction.

A part of their services strategy is to remotely retrieve data harvested locally in the PLCs to a central server. The data is used to create production reports for customers and to help perform predictive and preventive maintenance. Data collection is based on FTP access to each PLC via a central GateManager M2M server. After the data analysis, technicians have the option to

remotely connect to the monitored PLCs and perform further diagnostics and program adjustments.

FLSmidth chose the Secomea solution after a thorough evaluation of several industrial-access solutions. With security, ease of administration and scalability as their top priorities, Secomea was the clear choice.

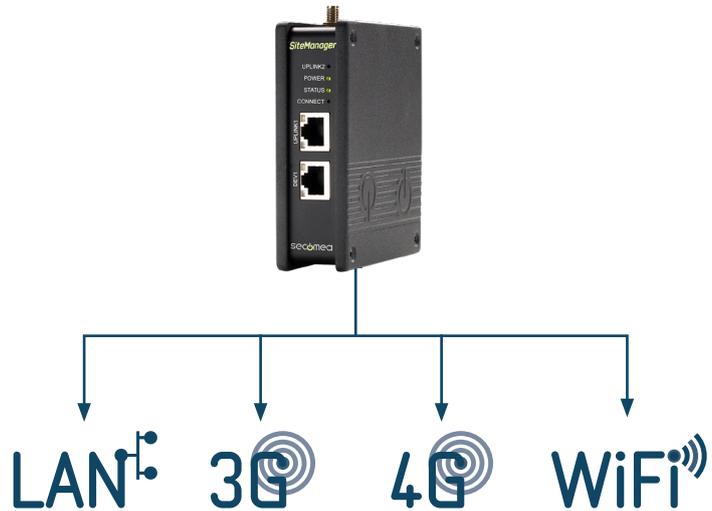


DISCOVER IN DETAIL

SITEMANAGER HARDWARE

Rugged certified hardware

Secomea SiteManager hardware gateways are rugged aluminum devices designed with industrial specifications. They support all features required for operating as secure access gateways for industrial installations – from small machines to complete production lines and whole factories. All SiteManager hardware gateways are certified for global installations.



SiteManager FEATURES		1129 / 3329	1139 / 3339	1139 / 3339 4G	1149 / 3349
Internet access options (Uplink)	4G/LTE	Via USB	Via USB	Integrated*	Via USB
	3G/GPRS-EDGE	Via USB	Integrated**	Integrated**	Via USB
	Ethernet 10/100Mbit	Yes	Yes	Yes	Yes
	WiFi	Via USB	Via USB	Via USB	Integrated
WiFi access point support		Via USB	Via USB	Via USB	Via USB
I/O ports (Input/Output)		2/2	2/2	2/2	2/2
Device access options (DEV)	via Ethernet	Yes	Yes	Yes	Yes
	via USB 2.0 port	Yes	Yes	Yes	Yes
	via Serial port	Yes	Yes	Yes	Yes
	via WiFi	Via USB	Via USB	Via USB	Via USB
DIN mountable		Yes	Yes	Yes	Yes
Device access agents (Model 11xx / 33xx)		5/25	5/25	5/25	5/25
Layer 2 and Layer 3 tunneling support		Yes	Yes	Yes	Yes
Optional EasyTunnel VPN support		Yes	Yes	Yes	Yes
LogTunnel Master/Client support		Yes	Yes	Yes	Yes
Use as local SMS gateway (Serial or Ethernet)		No	Yes	Yes	No
CPU		536 MHZ	536 MHZ	536 MHZ	536 MHZ
Forwarding/Scada agent routing speed		70 Mbps	70 Mbps	70 Mbps	70 Mbps
Operating temperature		-25 > +60°C	-25 > +45°C	-25 > +45°C	-25 > +60°C
Power feed		12-24 V/DC	12-24 V/DC	12-24 V/DC	12-24 V/DC

*4G/LTE models must be ordered for the respective destination: EMEA, US, China or Japan.
 **Or via External USB 3G/4G/LTE modem

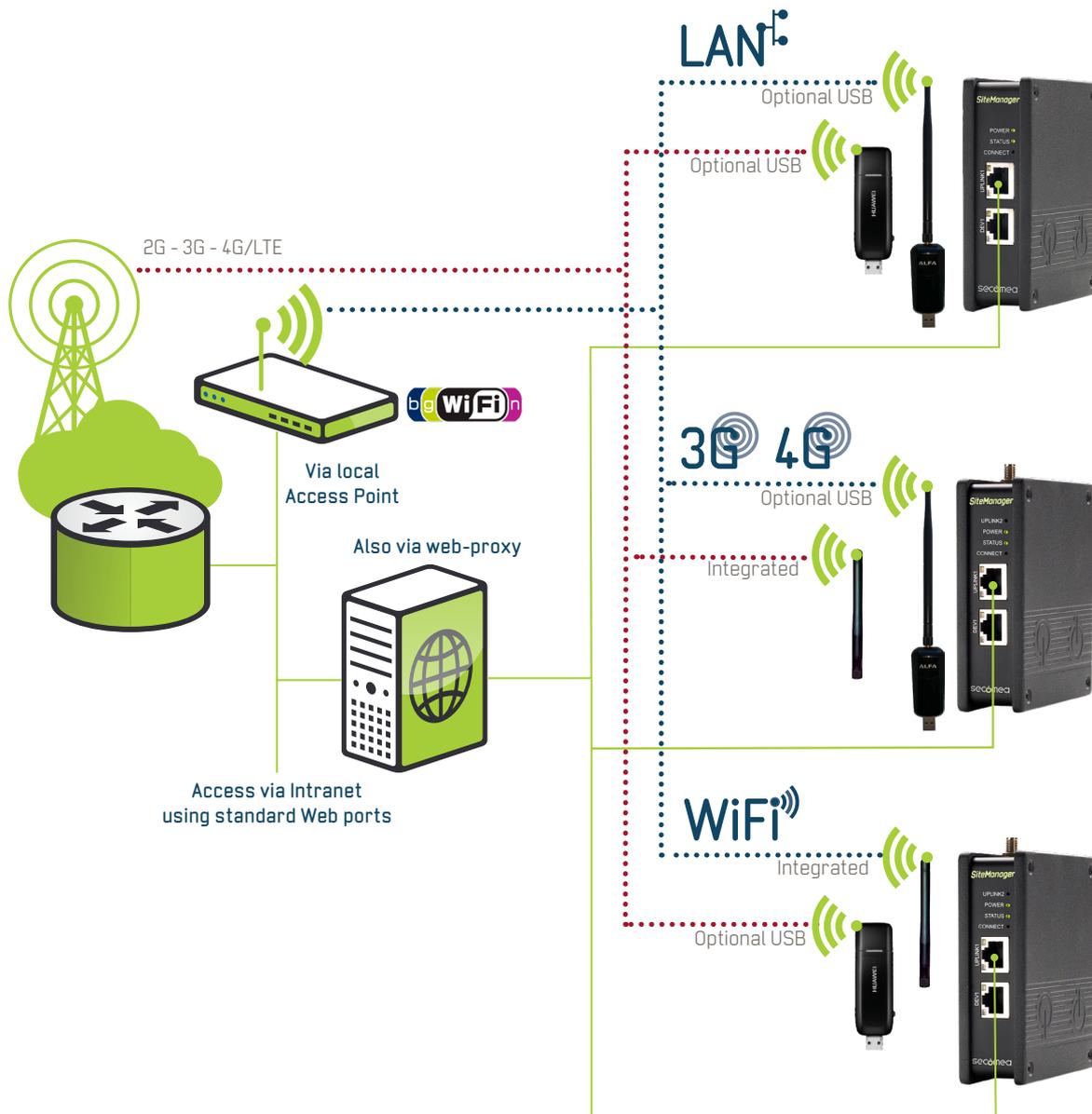
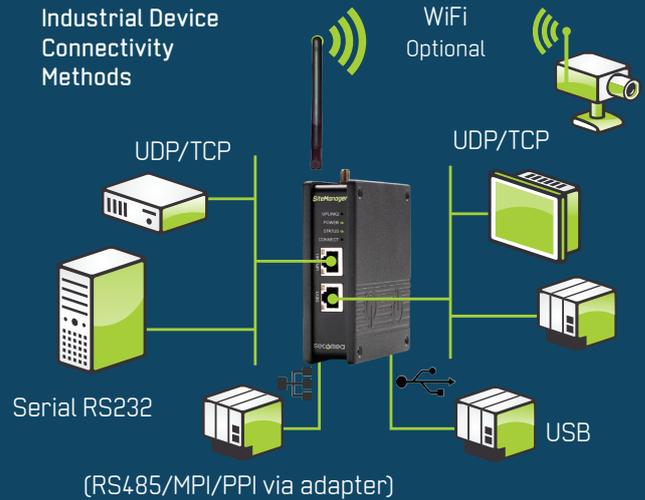
SiteManager 5 port

The SiteManager is also available as a 5 port version with an integrated managed switch, available as LAN model.



Flexible connectivity

The SiteManager hardware gateways support remote access to any type of physical communication port of industrial devices. They also support multiple Internet access options via USB adapters. This means any SiteManager can obtain Internet access via LAN, cellular or WiFi networks.

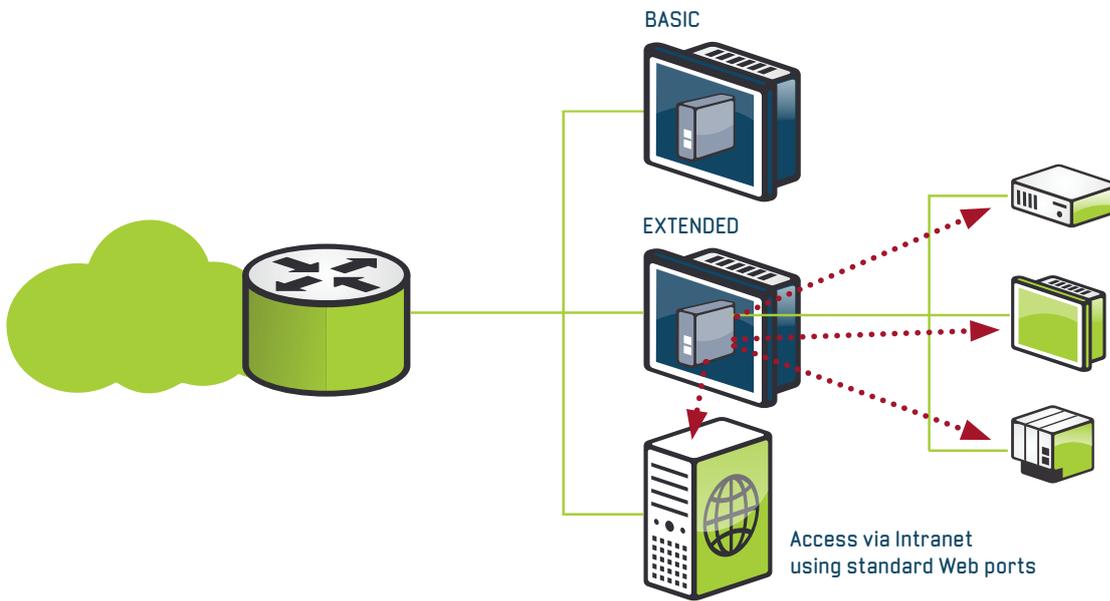
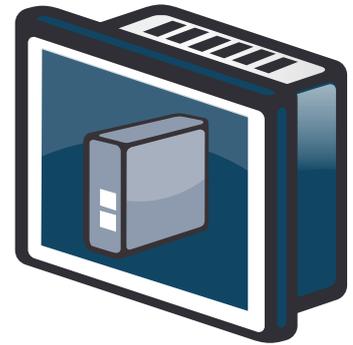


DISCOVER IN DETAIL

SITEMANAGER SOFTWARE

Embedded, lightweight software

Secomea SiteManager Embedded is a software gateway that installs on a PC, IPC or HMI panel and enables it to operate as a secure access gateway. It runs seamlessly with any operating system, in the background as a service, and is extremely lightweight, taking no significant system resources.



SITEMANAGER EMBEDDED LICENSE TYPES COMPARED TO SITEMANAGER HARDWARE	SiteManager Embedded BASIC	SiteManager Embedded EXTENDED	SiteManager hardware gateway
Full tunnel access to the PC/IPC/HMI	Yes	Yes	Yes
Gateway for access to other devices	No	Yes	Yes
Included 3G, 4G or WiFi Internet access options	No	No	Yes
Uses the PC/IPC/HMI network access options	Yes	Yes	No
LogTunnel Client support	Yes	Yes	Yes
LogTunnel Master Push/Pull support	No / No	Yes / No	Yes / Yes
Number of device agents (model dependent)	2	5-10	5-25
Device access via USB port / Serial port	No	No	Yes
Functions as Corporate/Device network firewall	No	No	Yes
Subnet Agent	No	Yes	Yes

MULTIPLE OPERATING SYSTEM AND CPU SUPPORT:

- ▶ Windows Standard and Server 32/64 bit x86
- ▶ Windows Embedded x86
- ▶ Windows Compact (CE7) x86*
- ▶ Windows Compact (CE7) ARM*
- ▶ Linux x86 (various distributions)
- ▶ Linux ARM / MIPS (various distributions)*
- ▶ VxWorks ARM*
- ▶ Android*

*May be subject to custom integration.

No license required

SiteManager Embedded can be installed, configured and connected to the GateManager without installing any license. You decide when it is connected and to which license you want to apply it. Any SiteManager Embedded software supports any activation license type.

Custom integration

Secomea is specialized in custom integration of SiteManager Embedded. Today it is delivered as a standard component in equipment from major automation manufacturers. Get in touch to discuss your integration project.

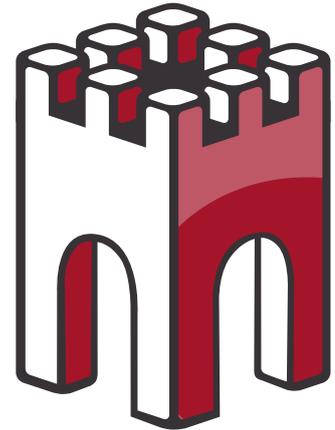
DISCOVER IN DETAIL

GATEMANAGER SERVERS

The center of your solution

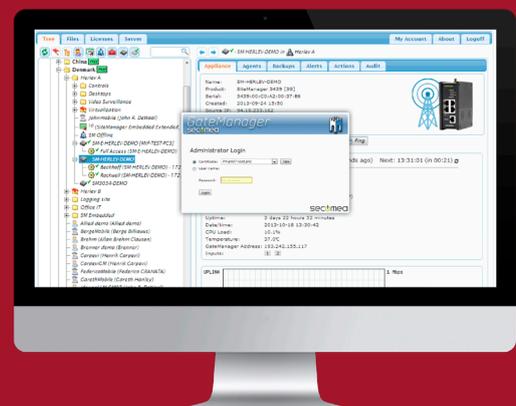
The GateManager™ M2M server is the central component of the Secomea solution. Typically it is offered as a service hosted by Secomea, or by one of our distributors, but you can also choose to host your own GateManager. Through the web-based GateManager Portal you can administer accounts, manage SiteManagers and devices, and much more.

The GateManager also operates as a secure termination point for all LinkManagers and SiteManagers. All connections and the encrypted traffic between LinkManagers and devices controlled by SiteManagers are handled by the GateManager, which also logs all events.



IN THE GATEMANAGER PORTAL, YOU CAN:

- ▶ Configure LogTunnels with drag'n'drop
- ▶ Administer all user accounts
- ▶ Configure SiteManagers individually or in bulk
- ▶ Replace SiteManagers based on auto backups
- ▶ Organize accounts and devices in domains
- ▶ Upgrade SiteManagers individually or in bulk
- ▶ Bulk firmware upgrade SiteManagers
- ▶ Administer access to specific devices
- ▶ Configure event alerts
- ▶ Monitor event logs
- ▶ Analyze detailed Usage Statistics



DISCOVER IN DETAIL

GATEMANAGER CLOUD SERVERS

The GateManager cloud server is designed to deliver the convenience of fast and easy web access, while avoiding own server setups. When you choose the GateManager cloud server, you receive an isolated private domain on the GateManager M2M server.



GATEMANAGER CLOUD SERVICE ACCOUNT TYPE COMPARISON	BASIC	PREMIUM
FREE with the Starter Package	Yes	No
Create and manage LinkManager user accounts	Yes	Yes
Organize equipment in domain tree structure and give differentiated user access	No	Yes
Remotely administer SiteManagers (configuration, backup, firmware upgrade)	Yes	Yes
View status on all connected equipment	Yes	Yes
Associate email alarms to devices	No	Yes
Access audit-logs (who connected to what, when)	Yes	Yes
Create Co-administrator accounts	No	Yes

GATEMANAGER SOLUTIONS



GateManager 8250 Linux server

The GateManager 8250 can be installed on your own Linux platform either as a stand-alone server or on a virtual private server in a hosting center.



GateManager 9250 virtual server

The GateManager 9250 is delivered as a platform-independent, virtual-image server. It's ready to run in a VMware, ESXi or Hyper-V virtualized environment.



GateManager for Amazon Cloud server

Amazon Web Services (AWS) allows you to freely select your preferred global region for your cloud server. Amazon is among the largest global VPS providers.



GateManager 4260 Hardware server

For machine builders who want to be in full control with a hardened platform installed locally, we also offer the GateManager 4260 hardware server. Suitable for small- to medium-sized installations, the 4260 hardware server is robustly built, and its administrator portal has the same look and feel as the software GateManagers.



Secomea Headquarters

Smedeholm 12-14
2730 Herlev
Denmark
Phone: +45 88 70 86 50
E-mail: info@secomea.com
www.secomea.com
VAT No: DK 31366038

Secomea North America

3608 St-Charles Boulevard, Suite 33
Kirkland (Montréal), Quebec
Canada H9H 3C3
Phone: +1 514-240-5880
E-mail: infous@secomea.com
www.secomea.com

Secomea China

A 504, 3, Juquan Road, Science Town,
510630 Guangzhou
China
Phone: +86 (0)20 2810 7727
E-mail: infocn@secomea.com
www.secomea.cn

Secomea Japan

Level 8, Nittochi Nishi-Shinjuku Building
6-10-1 Nishi-Shinjuku Shinjuku-ku
Tokyo, 160-0023
Japan
Phone: +81 (0)3 6369 9592
E-mail: infojp@secomea.com
www.secomea.com/jp

