

# Secure Remote Access to Industrial Devices



Access remote devices with Secomea's industrial Communication Solution:

- Install a *SiteManager™* secure gateway at the device location.
- Run the *LinkManager™* on your PC or mobile device, and remote devices are just a click away.
- Use your *GateManager™* account to control and monitor remote access.

The **SiteManager Embedded (SM-E)** installs on Windows or Linux Workstations, Servers, IPCs and Panel PCs.

The SM-E connects to the central GateManager M2M Server using standard web protocols through existing firewalls, without compromising corporate security.

The SM-E operates as gateway for full or differentiated access to the PC where it is installed, or other devices in the same network.

The SM-E includes agents for remote access to a large variety of PLC and HMI brands, while also allowing customizing agents to any other UDP/TCP based network device

The SM-E run-time license is remotely managed from the GateManager.

- The SM-E itself and its monitored devices are all centrally managed and accessible from the GateManager server
- The Secomea Link technology eliminates any potential routing or IP conflict issues typically seen with remote IP connections.
- Any network device can be easily accessed from a Windows PC for programming and diagnostics using common PLC or HMI software tools
- Any network device can be accessed from Tablets and Smartphones for accessing Web interfaces, Remote Desktop (RDP/VNC) or Remote HMI apps
- Support for static connections allowing central servers to collect status and receive alarms from devices.
- Allows installation as a Windows or Linux Service
- Configuration is done either locally or remotely through an intuitive web GUI
- Email alert definitions can be easily applied, to monitor and report status of devices configured on the SM-E
- Configuration changes are automatically backed up on the GateManager, and allow for easy backup and restore
- All events, such as user access and configuration changes, are automatically logged on the GateManager server.
- The host platform can perform control of remote access or retrieve status info from the SM-E using simple URL strings.



# Overview of the Solution

## Programming Access (e.g. Reactive Service)

LinkManager allows any program on a service technicians PC to remotely connect to network devices controlled by the SM-E; just browse for the device, click it, and you are connected.

## Monitoring Access (e.g. Machine Operation)

LinkManager Mobile allows a PC, iPad, iPhone or Android device to remotely access a device controlled by the SM-E. Once connected to the device, you can connect to its web interface or remote desktop feature (RDP/VNC). For HMI panels, such as Pro-face and Schneider, you can even connect with the special Remote HMI applications.

## Central Administration (e.g. Access Control)

The GateManager controls all encrypted connections, and allow for fine grained user access. With intuitive drag-and-drop actions you can control specific user access to specific factories, specific devices, and even specific services on a device.

## Data Collection (e.g. Preventive Maintenance)

Static connections can be established between the SM-E and the GateManager, allowing a central server to collect or receive status information from the monitored devices.

## Security - The number One priority!

Connections are established based on TLS and are protected against man-in-the-middle attacks by unique TLS keys and Trust-on-first-use principles.

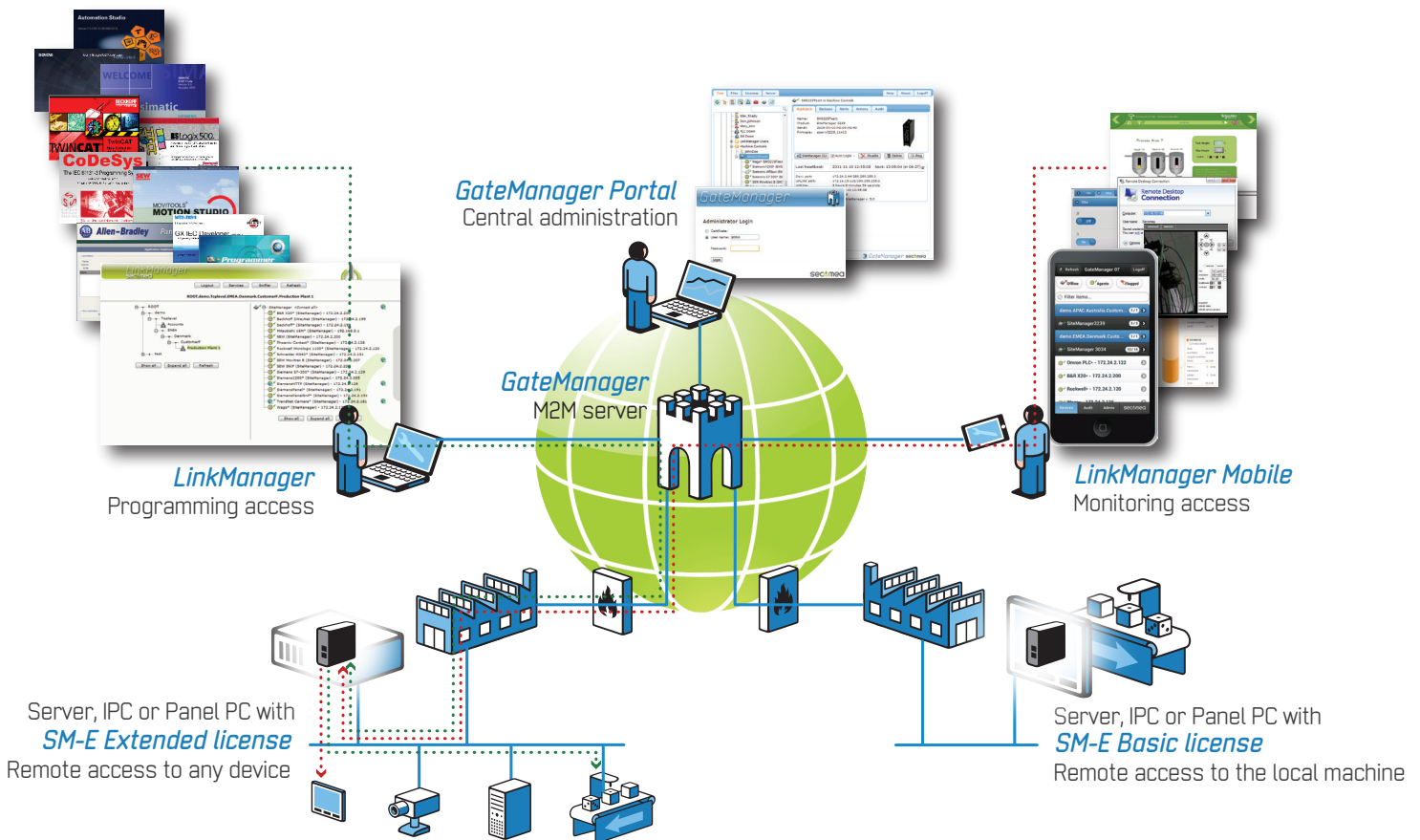
All connections are 256bit AES encrypted, even when using port 80, and all connections are initiated from inside the firewall and out.

LinkManger is based on two-factor authentication, using x509 certificates combined with password.

LinkManager Mobile supports two-factory security by combining dynamic SMS codes with user name and password.

GateManager Portal access supports combination of both x509 certificate and SMS code.

All events are logged centrally on the GateManager server. The Audit log provides details about date and time that users have connected to devices, as well as any configuration change.





# Technical Specifications



## Hardware requirements

- Intel x86 or compatible CPU
- 10 Mbyte free physical RAM
- 5 Mbyte of HDD storage

## OS requirements

- Windows XP/7/8 32/64 bit standard or embedded (Windows installer automatically installs and starts the service)
- Typical Linux x86 distributions, e.g. Debian, Ubuntu, CentOS etc. (Install script automatically installs and starts the service)

## Remote Access Features (with BASIC license)

- **From Windows workstations:** Full On-demand access from LinkManager to any service (UDP or TCP) on the Windows machine on which SM-E is installed, such as HTTP, RDP, VNC, SQL, FTP etc.
- **From Tablets and Smartphones:** On-demand access from LinkManager Mobile to web enabled services (http, https) as well as remote desktop (VNC, RDP) on the Windows machine on which SM-E is installed
- **From a Log server:** Static connections for push or pull collection of data by most TCP and UDP protocols.
- Support for 2 unique agents, which can each define access to one or more specific services (UDP or TCP) on the Windows machine where SM-E is installed

## EXTRA Remote Access Features (with EXTENDED license)

- **From Windows workstations:** Full On-demand access from LinkManager to most TCP and UDP connections on any network device (such as PLCs, HMIs, PCs) located on the same network as the Windows machine where SM-E is installed.
- **From Tablets and Smartphones:** On-demand access from LinkManager Mobile to web enabled services (http, https) as well as remote desktop (VNC, RDP) on any network device located on the same network as the Windows machine where SM-E is installed.
- **From a Log server:** Static connections for push or pull collection of data by most TCP and UDP protocols to any device on the same network as the Windows machine where SM-E is installed.
- Support for 5 different IP target addresses (represented by SiteManager Agents) and upgradeable to 10 Agents

## Configuration and Management

- Configuration and maintenance via web browser, accessible locally on the PC where SM-E is installed, or remotely from the GateManager Portal, LinkManager or LinkManager Mobile.
- Automatic configuration backup via GateManager
- Configuration profile changes via GateManager (manually or scheduled)
- Extensive online help in the SM-E
- Audit log of all events (user access, config changes etc.)
- System log accessible locally and via the GateManager Portal

- GateManager Alerts (to e-mail, SMS) based on SiteManager Agent status.
- Remote access control and status info can be exchanged from the local PC by sending simple URL strings to the SM-E integrated Web server

## Other platforms

- SM-E is designed for embedding into other operating systems. The architecture would allow adaptation to Windows CE, Linux, RTOS and proprietary platforms. This will, however, require special development agreements.

Contact us for more information

Partnumbers	Description
26976	SM-E Basic license, 2, agents
26977	SM-E Extended license, 5 agents
26978	SM-E Extended license, 10 agents
SM-E is subject for volume discounts. Contact your point of purchase for information about multi-license packages.	

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