

# Right tools for the right job

Danfoss' System Manager is the key component of the intelligent ADAP-KOOL® refrigeration and HVAC system for food retail. The System Manager is the brain of the system, coordinating data to and from the individual controllers, including temperature data for logging and alarms. It can be set up to coordinate optimization functions, such as suction pressure and coordinated defrosting, resulting in significant energy reduction and improved temperature control.

The System Manager provides both a local screen and full Web-enabled user interface. In support of the latest CO<sub>2</sub> trends and customer applications the System Manager offers simplified setup via browser setup wizards.

### Remote Management Tool (RMT)

The RMT tool is designed for the commissioning Engineer to prepare for the actual installation and download to the System Manager itself. It features:

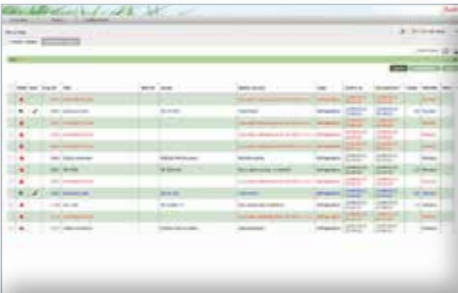
- Full offline programming in web environment
- Use custom images to create graphic screens seen in local screen and web browser
- Address Book to store multi site details
- Map configured datapoints for live view of status
- Load System Manager firmware
- Save / load System Manager database



### StoreView Desktop

The StoreView Desktop is designed for the store manager and staff, to keep the overview of the current status on alarm, temperatures and KPI's.

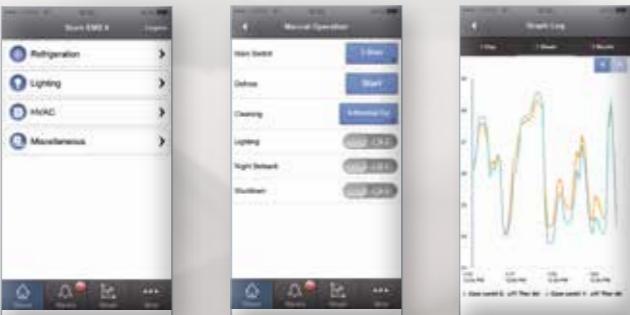
- Designed as a stand alone PC desktop application
- Fast connection time since all required web files are self contained
- Same web environment as the system manager web browser, but bundled up as a desktop application
- User preference to allow store to configure per their requirements



### SiteService App

The SiteService App is designed for the service technician and offers the ability to remotely connect to a Danfoss controls system from a tablet or smart phone, featuring:

- Site connections address book
- Live plant status (refrigeration/HVAC/ lighting/energy/ miscellaneous points)
- Device details
- Read/write parameter access
- Manual control (e.g. start a defrost)
- Alarm management
- History graphs visualization



## Discover the opportunities with Danfoss Smart Store



Learn more at [food-retail.danfoss.com](http://food-retail.danfoss.com)

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Overview Brochure | ADAP-KOOL® System Managers

Achieve your energy goal with the best **control** and **system management** for Food Retail

**24/7**

monitoring and supervision of your system



## System Manager AK-SM 800 series

The new System Manager AK-SM 800 series core design concept provides premier store control with the seamless connectivity from "case to cloud". It supports centralized and decentralized control strategy and is compatible with Danfoss case and pack controllers and Danfoss I/O modules.

### New and improved hardware

- Large colour screen (800x600)
- Easy USB access (software updates / database load / save)
- No internal battery to worry about

### Updated feature and functions

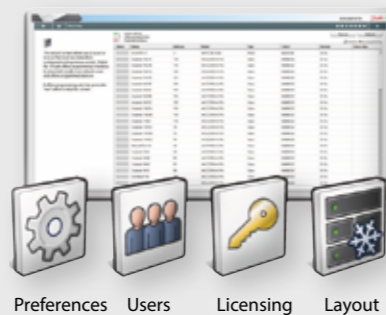
- New browser based 'wizards' to simplify initial configuration
- Multi graphic screens, allowing custom images with live datapoints showing status
- Built-in energy optimization functionality

### Get-Connected Web technology

The AK-SM 800 has a build-in web browser, and presents system information in a meaningful and rich way either as dashboards or automatic generated system graphics or asset detail screens.

### Wizard assistance for configuration

The designated web wizards are intended to assist the user in a step by step format offering clean screen formatting and drag and drop functionality. The net result is improved commissioning times and less chance of configuration errors.



Preferences Users Licensing Layout



	AK-SC 255 Rack version	AK-SM 820 Series	AK-SM 850 Series	AK-SM 880 Series
<b>HARDWARE PLATFORM</b>				
Box Format (Wall Mountable)	✓	✓	✓	✓
Battery Back-up for Database / Settings	✓	not required	not required	not required
Ce, C-Tick, UL, Haccp	✓	✓	✓	✓
<b>FIELD BUS / COMMUNICATIONS</b>				
Lonworks RS485	✗	✓	✓	✓
Lonworks TP78	✓	✗	✗	(special order)
EKC Modbus	✓	✓	✓	✓
Ethernet (LAN/WAN Connectivity)	✓	✓	✓	✓
<b>REFRIGERATION CONTROL</b>				
De-Centralized Control	case only	✓	✓	✓
Centralized Control (Rack Control / I/O)	✓	✓	✓	✓
Designed for Danfoss CO <sub>2</sub> Application Support (AK2 Controller)	✗	✓	✓	✓
<b>HVAC CONTROL</b>				
Centralized Control Via I/O	✓	✓	✗	✓
De-Centralized	✓	✓	✗	✓
Next Generation HVAC Control (MCX)	✗	✓	✗	✓
<b>STORE LIGHTING CONTROL</b>				
Centralized Control Via I/O	✓	✓	✓	✓
De-Centralized Square D Powerlink	✓	✓	✓	✓
Next Generation Lighting Control (MCX)	✗	✓	✓	✓
<b>ENERGY METERING</b>				
Energy Meter Points	80	32	80	80
<b>REFRIGERATION GAS DETECTION</b>				
Leak Detector Inputs (Via I/O)	50	10	50	50
<b>MASTER CONTROL</b>				
Po (Suction) Optimization	✓	✓	✓	✓
<b>REMOTE ACCESS</b>				
Standard Web Browser	✗	✓	✓	✓
Service Tool	✗	✓	✓	✓
AKA65	✓	✗	✗	✗
<b>SIMPLE LEGEND GRAPHICS</b>				
Bit Map Static Graphic For Local Screen View	✗	✓	✓	✓
Graphic Shown In PC	✓	✓	✓	✓
<b>EASE OF USE</b>				
Offline Programming	✓	✓	✓	✓
Full Web Interface Consolidating all Front Ends	✗	✓	✓	✓
EDS Support (Danfoss Services)	✓	✓	✓	✓
Service Tool Tunnel	✗	✓	✓	✓



For full parameter list visit  
[food-retail.danfoss.com/system-managers](http://food-retail.danfoss.com/system-managers)

## Enterprise Management Solutions

Danfoss offers different options when it comes to Chain Management systems, from basic data harvesting to full monitoring service.



Temperature monitoring



Energy overview



Leak detection

### Danfoss Electronically Delivered Services (EDS)

Danfoss EDS is today monitoring 5000 stores and handling more than 3 million alarms per year.

With an EDS subscription, Danfoss takes care of data collection, analysis and reporting. Available in different value adding service packages that enable you to:

- benchmark stores and divisions to promote energy and environmental awareness
- sustain energy savings achieved through optimization tailored to your facilities
- improve profitability by reducing food loss and ensuring food quality

### Open Standard XML Interface

- Standard XML Interface for 3rd party monitoring and managing
- Documentation on request
- No License or Protocol Fees

# XML

