

ADAP-KOOL® System Manager Product Portfolio



AK-SM 800



AK-SC 255



AK-SM 720



AKA 245



AK-SM 820



AK-SM 850



AK-SM 880

Hardware Platform

Box format (wall mountable)	✓	✓	✗	✗	✓	✓	✓
DIN format (designed for panel mounting)	✗	✓	✓	✓	✗	✗	✗
USB (Load/Save software)	✓	✓	✗	✗	✓	✓	✓
Color Screen	SVGA 800x600	✓	✗	✗	SVGA 800x600	SVGA 800x600	SVGA 800x600
Battery backup for database/ settings	not required	✓	✓	✓	not required	not required	not required
RTC	✓	✓			✓	✓	✓
CE, C-Tick, UL, HACCP	✓	✓			✓	✓	✓

Field Bus / Communications

Lonworks RS485	✓	✗	✓	✓	✓	✓	✓
Lonworks TP78	✓ (special order)	✓	✗	✗	✗	✗	✓ (special order)
EKC Modbus	✓	✓	✓	✓	✓	✓	✓
SNMP (x1 port - LAN/WAN port)	✓	✓	✗	✗	✓	✓	✓
Ethernet (LAN/WAN connectivity)	✓	✓	✓	✓	✓	✓	✓
RS 232 (serial connection to PC)	✗	✓	✓	✓	✗	✗	✗
Legacy ACCESS controller support	✗	✓	✗	✗	✗	✗	✗

Refrigeration Control

De-centralized control (Case and Pack controllers)	✓	Case only	✓	✓	✓	✓	✓
Centralized control (Rack control / I/O)	✓	✓	✗	✗	✓	✓	✓
AK2 Case and Pack controller support	✓	✓			✓	✓	✓
Designed for Danfoss Co2 application support (AK2 controller)	✓	✗	✓	✗	✓	✓	✓

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HVAC Control							
Centralized control via I/O	✓	✓	✗	✗	✓	✗	✓
De-Centralized	✓	✓			✓	✗	✓
Next generation HVAC control (MCX)	✓	✗	✗	✗	✓	✗	✓
Store Lighting Control							
Centralized control via I/O	✓	✓	✓	✗	✓	✓	✓
De-Centralized Square D PowerLink	✓	✓	✗	✗	✓	✓	✓
Next generation Lighting control (MCX)	✓	✗	✗	✗	✓	✓	✓
Energy Metering							
Energy meter points	80	80	?	✗	32	80	80
Pulse input (via AK-XM 107A module)	✓	✓	✓	✗	✓	✓	✓
Veris EH8035,EH8036 modbus	✓	✓	✗	✗	✓	✓	✓
WattNode Plus Modbus	✓	✓	✗	✗	✓	✓	✓
Refrigeration Gas Detection							
Leak detector inputs (Via I/O)	50	50			10	50	50
Master Control							
AKC ON	✓	✓	✓	✓	✓	✓	✓
Night Setback	✓	✓	✓	✓	✓	✓	✓
Rail heat control (via I/o or controller bus communications)	✓	✓	✓	✓	✓	✓	✓
Scheduling (Case lighting, Night setback, Shutdown, Def, 1 def a week)	✓	✓	✓	✓	✓	✓	✓
Language Support							
16 languages available	✓	✓	✓	✓	✓	✓	✓

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Calculations and conversion factors

Calculation points	96	96		x	96	96	96
Conversion factors	10	10		x	10	10	10

Remote Access

Standard Web browser	✓	x	x	x	✓	✓	✓
StoreView Desktop	✓	x	x	x	✓	✓	✓
Service Tool	✓	x	✓	x	✓	✓	✓
AKA65	x	✓	x	x	x	x	x
Built in IP communications	✓	✓	✓	x	✓	✓	✓
Analog modem	x	✓	✓	✓	x	x	x

Simple Legend graphics

Bit map static graphic for local screen view	✓	x	x	x	✓	✓	✓
Graphic shown in PC	✓	✓	✓	✓	✓	✓	✓

Alarm Management configuration options

# of alarms stored before being overwritten	250	250	350	250	250	250	250
e-mail alarm output	✓	✓	x	x	✓	✓	✓
# of alarm network connections	4	4	1	1	4	4	4
Manual export of alarms to .csv via browser alarms screen	✓	✓	✓	✓	✓	✓	✓
Alarm logic relay output	✓	✓	x	x	✓	✓	✓

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History (logs)

Number of history points	600	600	12MB memory space	256kb memory	600	600	600
Save data as .hst file	✓	✓	✗		✓	✓	✓
Export .hst data to .CSV	✓	✗	✗		✓	✓	✓
Sample rates (min)	1,2,10,30, 60	1,2,10,30, 60	5,10,30 Sec, 1,5,10,15,30min, 1,2,4,24Hr	2sec-24Hrs	1,2,10,30, 60	1,2,10,30, 60r	1,2,10,30, 60

Supported Devices (via field bus)

EKC, AKCC, AKPC, AK2, AK I/O	✓	✓	✓	✓	✓	✓	✓
Danfoss Drives	✓	✓	✓	✓	✓	✓	✓
Danfoss SLV	✓	✓	✓	✓	✓	✓	✓
Danfoss Optima	✓	✓	✓	✓	✓	✓	✓

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	System capacity						
Max rack/pack controllers	12	12	n/a	n/a	5	12	12
Max controller devices on field bus (i.e. EKC/CC.)	120	120	200	120	32	120	120
Max schedules (Case lighting, Night setback, Shutdown, Def)	100	100	20		100	100	100
Coordinated defrost	✓	✓	✓	✓	✓	✓	✓
Shutdown - ON/Off	✓	✓	✓	✓	✓	✓	✓
AKC on	✓	✓	✓	✓	✓	✓	✓
HVAC	45	45	×	×	45	×	45
Lighting zones	30	30	8	×	30	30	30
Energy meter input points	80	80	8	×	32	80	80
Leak detector inputs	50	50	10	×	10	50	50
Miscellaneous Relay outputs	70	70	32	×	20	70	70
Miscellaneous Sensor inputs	80	80	11 (built in)	×	20	80	80
Miscellaneous On/Off inputs	70	70	8 (built in)	×	20	70	70
Miscellaneous Variable outputs	70	70	2	×	20	70	70
Alarms (see comment)	250	250	350	250	250	250	250
history points per front end	600	600	?	×	600	600	600
Control support	✓	✓	×	×	✓	✓	✓
ACCESS support	×	✓	×	×	×	×	×
Alarm relay outputs (built in)	1	1	4	2	1	1	1
Max Multiple fronts interconnected to form 'host network'	10	10	×	×	10	10	10

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User Authorization

Auth levels	7	50 accounts		based on AKM	7	7	7
Users	20	n/a		based on AKM	20	20	20

Ease of Use

Offline programming	✓	✓	✗	✗	✓	✓	✓
Full web interface consolidating all front ends	✓	✗	✗	✗	✓	✓	✓
Web wizards to assist in commissioning	✓	✗	✗	✗	✓	✓	✓
Dashboard view that presentation	✓	✗	✗	✗	✓	✓	✓
Direct EM-800 support	✓	✓	✗	✗	✓	✓	✓
EDS support (Danfoss services)	✓	✓	✗	✓	✓	✓	✓
XML open interface	✓	✓	✗	✗	✓	✓	✓
Service Tool tunnel	✓	✗	✓	✗	✓	✓	✓