

**SIEMENS**

**MK8000 OPC Server Interface  
Specifications for Simatrix**

**Siemens Building Technologies**

Fire & Security Products

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# Simatrix

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The Simatrix is a CCTV crossbar, capable of connecting CCTV cameras and video monitor for local and distributed video surveillance systems. It also provides support for security alarm handling, and camera fault detection.

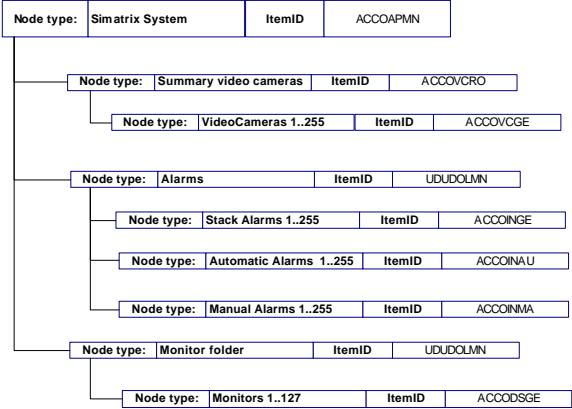
Depending on the hardware configuration - specifically the models 16-4, 64-8, and SYS - the matrix can connect 16, 64, or 256 cameras, and 4, 8, or 64 monitors. The connection to DMS host is based on a RS2323 serial line, and on the CDDL/CDSF protocol.

The alarm states in Simatrix can be triggered by digital inputs on hardware contacts, or via alarm messages from DMS host. Simatrix foresees up to three types of alarm modes, and they are different depending on the way the alarm reset is handled:

- Manual alarms: Reset action is required from the operator;
- Automatic alarms: Reset action is not required;
- Stack alarms: Alarms are associated to cameras and stacked on the monitors - they get reset when the corresponding monitor is switched to another camera.

# Summary view

## Simatrix Multistate Model



<b>S</b> FSP division	
Multistate Model for Simatrix	
MK8000 OPC Server for subsystems	
Last modified:	Oct 29, 2003

## Application - (ACCOAPMN)

The "Symatrix Application" object represents the entire Symatrix and the geographical area it covers.

Multistate		Commands											
		1 Ack	2 Reset	4 Arm	8 Disarm	16 Test	32 Active	64 Quiet	128 Disconn	256 Connect	512 Block	1024 Manual	2048 Status
1000	Quiet No abnormal conditions present.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1369	Not Aligned The control unit is not aligned to the field.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1370	Alignment In Progress The alignment phase is in progress.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1999	Fault Ack The communication is down. The event has been acknowledged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Summary video-cameras - (ACCOVCRO)

Multistate	Commands											
	1 Ack	2 Reset	4 Arm	8 Disarm	16 Test	32 Active	64 Quiet	128 Disconn	256 Connect	512 Block	1024 Manual	2048 Status
1000 Quiet No abnormal conditions present.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1999 Fault Ack The faulty condition has been detected on the video cameras. The event has been acknowledged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Video Camera - (ACCOVCGE)

This object represents the video camera connected to the symatrix.

Multistate	Commands											
	1 Ack	2 Reset	4 Arm	8 Disarm	16 Test	32 Active	64 Quiet	128 Disconn	256 Connect	512 Block	1024 Manual	2048 Status
1000 Quiet No abnormal conditions present.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1999 Fault Ack The video camera is in fault. The event has been acknowledged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Alarm inputs folder - (UDUDOLMN)

This node is a folder.

Multistate	Commands											
	1 Ack	2 Reset	4 Arm	8 Disarm	16 Test	32 Active	64 Quiet	128 Disconn	256 Connect	512 Block	1024 Manual	2048 Status
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Stack Alarms - (ACCOINGE)

This object represents the status for the Stack alarms that are accumulated on the CCTV monitors with a shifting technique (the cameras associated to the alarm are shown on the monitor according to a programmed priority), and then reset by switching the monitor to another camera.

Multistate	Commands											
	1 Ack	2 Reset	4 Arm	8 Disarm	16 Test	32 Active	64 Quiet	128 Disconn	256 Connect	512 Block	1024 Manual	2048 Status
501 Alarm Ack The stack alarm is in alarm. The event has been acknowledged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1000 Quiet No abnormal conditions present.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1351 Anomaly Ack The event has been acknowledged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1400 Disconnected The Stack alarm is disconnected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Automatic Alarms - (ACCOINAU)

This objects represents the status of the Automatic Alarms.

Multistate		Commands											
		1 Ack	2 Reset	4 Arm	8 Disarm	16 Test	32 Active	64 Quiet	128 Disconn	256 Connect	512 Block	1024 Manual	2048 Status
501	Alarm Ack The Automatic Alarm is in alarm. The event has been acknowledged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1000	Quiet No abnormal conditions present.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1351	Anomaly Ack The event has been acknowledged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1400	Disconnected The Automatic Alarm is disconnected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## Manual Alarms - (ACCOINMA)

This objects represents the status of the Manual Alarms.

Multistate		Commands											
		1 Ack	2 Reset	4 Arm	8 Disarm	16 Test	32 Active	64 Quiet	128 Disconn	256 Connect	512 Block	1024 Manual	2048 Status
501	Alarm Ack The manual alarm is active. The event has been acknowledged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1000	Quiet No abnormal conditions present.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1351	Anomaly Ack The event has been acknowledged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1400	Disconnected the Manual Alarm is disconnected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Monitor folder - (UDUDOLMN)

This is a folder.

Multistate		Commands											
		1 Ack	2 Reset	4 Arm	8 Disarm	16 Test	32 Active	64 Quiet	128 Disconn	256 Connect	512 Block	1024 Manual	2048 Status
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Monitor - (ACCODSGE)

These objects correspond to the monitors configured in Simatrix.

There aren't feedbacks for them, so you need to send them the "Switch camera on monitors" command because this is the only way to reset a stack alarm.

Note: To reset a stack alarm, you must send the "Switch camera..." command on the monitor where the alarm has been displayed.

Multistate	Commands											
	1 Ack	2 Reset	4 Arm	8 Disarm	16 Test	32 Active	64 Quiet	128 Disconn	256 Connect	512 Block	1024 Manual	2048 Status

1000	Quiet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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The command disarm try to reset a monitor in case of alarm. No abnormal conditions present.

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