

SIEMENS

SICAM A8000 Series

CP-8000

MICS for IEC 61850 Ed. 2 Client (ET85)

Model Implementation Conformance
Statement for the
IEC 61850 Ed.2 Client Interface in
SICAM A8000 CP-8000

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Disclaimer of Liability

Although we have carefully checked the contents of this publication for conformity with the hardware and software described, we cannot guarantee complete conformity since errors cannot be excluded. The information provided in this manual is checked at regular intervals and any corrections that might become necessary are included in the next releases. Any suggestions for improvement are welcome.

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Preface

This document is applicable to the following product(s):

- SICAM A8000 CP-8000

Purpose of this manual

This manual describes the Model Implementation Conformance Statement for the IEC 61850 Ed. 2 Client interface in:

- SICAM A8000 CP-8000 using firmware "ET85 Rev. 03.04"

Note:

MICS "Model Implementation Conformance Statement" contains the declaration of the used logical node types.

Target Group

The document you are reading right now is addressed to users, who are in charge of the following engineering tasks:

- Customers
- Sales engineering and technical clarification
- Conceptual activities, as for example design and configuration
- Technical system maintenance

Notes

This document is based on:

- UCA International Users Group
Testing Sub Committee
Template version 1.0
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1 Introduction

This model implementation conformance statement is applicable for the IEC 61850 client interface in **SICAM A8000 CP-8000** with firmware "**ET85 Rev. 03.04**".

This MICS document specifies the supported Common Data Classes for IEC 61850 Edition 1 and Edition 2.

1.1 SICAM A8000 CP-8000 “Device Under Test” (DUT)

Series	Device	MLFB	Description
SICAM A8000	CP-8000	6MF2101-0AB10-0AA0	SICAM A8000 CP-8000 24...60 VDC Temperature range -25 to +70°C

¹⁾ SICAM A8000 CP-8000 “on board Ethernet interface” with **ET85 Rev. 03.04** firmware.



Notes:

- the red marked interface connector is assigned to IEC61850 Ed. 2 Client with ET85 firmware.
- the red marked interface connector is also used for WEB-Browser interface for IEC61850 Ed. 2 Client.
- the blue marked interface connector is used for engineering Software TOOLBOX II.

Firmware Revisions

	System element	HW#	FW#	Rev	TBII-Update	SetRev	P	SSE#	Task	Supportof system elements
M	CP-8000/CPC80	8000	8080	11	11 [11]					Supported
M-PRE/1	SM-8098/ET85	8098	8505	03.04	03.04 [03.04]			129		Supported
M-Bus0/PBA-0	USIO81	8099	8098	04.01	04.01 [04.01]			0		Supported

Note: IEC61850 Ed.2 functionality is included in firmware ET85 Rev. 03.04

Power Supply / CPU-Boards / Interface Cards



Designation	Item-Number/MLFB
SICAM A8000 CP-8000 24...60 VDC Temperature range -25 to +70°C	6MF2101-0AB10-0AA0

2 Supported Common Data Classes

The “Ed” column indicates Edition 1 and/or Edition 2.

Common data class specifications for status information

CDC	Ed	Description	Supported	Comment
SPS	1,2	Single point status	Y	
DPS	1,2	Double point status	Y	
INS	1,2	Integer status	Y	
ENS	2	Enumerated status	Y	
ACT	1,2	Protection activation information	Y	
ACD	1,2	Directional protection activation information	Y	
SEC	1,2	Security violation counting	N	
BCR	1,2	Binary counter reading	Y	
HST	2	Histogram	N	
VSS	2	Visible string status	N	
Notes:				

Common data class specifications for measurement information

CDC	Ed	Description	Supported	Comment
MV	1,2	Measured value	Y	
CMV	1,2	Complex measured value	Y	
SAV	1,2	Sampled value	Y	
WYE	1,2	Phase to ground/neutral related measured values of a three-phase system	Y	
DEL	1,2	Phase to phase related measured values of a three-phase system	Y	
SEQ	1,2	Sequence	Y	
HMV	1	Harmonic value	N	
HMV	2	Harmonic value	N	
HWYE	1	Harmonic value for WYE	N	
HWYE	2	Harmonic value for WYE	N	
HDEL	1	Harmonic value for DEL	N	
HDEL	2	Harmonic value for DEL	N	
Notes:				

Common data class specifications for controls

CDC	Ed	Description	Supported	Comment
SPC	1,2	Controllable single point	Y	
DPC	1,2	Controllable double point	Y	
INC	1,2	Controllable integer status	Y	
ENC	2	Controllable enumerated status	Y	
BSC	1,2	Binary controlled step position information	Y	
ISC	1,2	Integer controlled step position information	Y	
APC	1	Controllable analogue process value	N	
APC	2	Controllable analogue process value	Y	
BAC	2	Binary controlled analog process value	N	
Notes: Data attribute stSeld is not supported.				

Common data class specifications for status settings

CDC	Ed	Description	Supported	Comment
SPG	1,2	Single point setting	N	
ING	1,2	Integer status setting	Y	Only FC = SP
ENG	2	Enumerated status setting	N	
ORG	2	Object reference setting	N	
TSG	2	Time setting group	N	
CUG	2	Currency setting group	N	
VSG	2	Visible string setting	N	
Notes:				

Common data class specifications for analogue settings

CDC	Ed	Description	Supported	Comment
ASG	1,2	Analogue setting	Y	Only FC = SP
CURVE	1,2	Setting curve	N	
CSG	2	Curve shape setting	N	
Notes:				

Common data class specifications for description information

CDC	Ed	Description	Supported	Comment
DPL	1,2	Device name plate	N	
LPL	1,2	Logical node name plate	N	
CSD	1,2	Curve shape description	N	
Notes:				

Common data class specifications for tracking

CDC	Ed	Description	Supported	Comment
CST	2	Common service tracking	N	
BTS	2	Buffered report tracking service	N	
CTS	2	Control tracking service	N	
GTS	2	GOOSE Control block tracking service	N	
LTS	2	Log control block tracking service	N	
MTS	2	MSVCB tracking service	N	
NTS	2	USVCB control block tracking service	N	
OTS	2	Log tracking service	N	
STS	2	SGCB tracking service	N	
UTS	2	Unbuffered report tracking service	N	
Notes:				

Supported

Y = Client can issue an ASCII service on this CDC and process the data from/to the CDC

N = Client can't issue an ASCII service on this CDC and doesn't process the data from/to the CDC