

IEC 61850 MMS Server PICS for the MGate 5119

1 Description

The following ACSI conformance statements provide an overview and details about the IEC 61850 protocol module in the MGate 5119 Series:

- ACSI basic conformance statement
- ACSI models conformance statement
- ACSI service conformance statement

Table Entries

The statements specify the communication features mapped to IEC 61850-8-1 Edition 2.0.

Y	Supported
N	Not supported
—	Not applicable, because of prerequisite features or conditions that are not supported or not present.

2 ACSI Basic Conformance Statement

Client Server Roles

	Description	Client/Subscriber	Server/Publisher	Value/Comments
B11	Server side (of TWO-PARTY-APPLICATION-ASSOCIATION)	—	Y	
B12	Client side (of TWO-PARTY-APPLICATION-ASSOCIATION)	—	—	

SC SMs Supported

	Description	Client/Subscriber	Server/Publisher	Value/Comments
B21	SC SM: IEC 61850-8-1 used	—	Y	
B22	SC SM: IEC 61850-9-1 used	—	—	Deprecated
B23	SC SM: IEC 61850-9-2 used	—	N	
B24	SC SM: other	—	N	

Generic Substation Event Model (GSE)				
	Description	Client/Subscriber	Server/Publisher	Value/Comments
B31	Publisher Side	—	N	
B32	Subscriber Side	—	—	

Transmission of Sampled Value Model (SVC)				
	Description	Client/Subscriber	Server/Publisher	Value/Comments
B41	Publisher Side	—	N	
B42	Subscriber Side	—	—	

3 ACSI Models Conformance Statement

If Server or Client side (B11/12) is supported:				
	Description	Client/Subscriber	Server/Publisher	Value/Comments
M1	Logical device	—	Y	
M2	Logical node	—	Y	
M3	Data	—	Y	
M4	Data set	—	Y	
M5	Substitution	—	N	
M6	Setting group control	—	N	

Reporting				
	Description	Client/Subscriber	Server/Publisher	Value/Comments
M7	Buffered report control	—	Y	
M7-1	sequence-number	—	Y	
M7-2	report-time-stamp	—	Y	
M7-3	reason-for-inclusion	—	Y	
M7-4	data-set-name	—	Y	
M7-5	data-reference	—	Y	
M7-6	buffer-overflow	—	Y	
M7-7	entryID	—	Y	
M7-8	BufTm	—	Y	
M7-9	IntgPd	—	Y	
M7-10	GI	—	Y	
M7-11	conf-revision	—	Y	

M8	Unbuffered report control	—	Y	
M8-1	sequence-number	—	Y	
M8-2	report-time-stamp	—	Y	
M8-3	reason-for-inclusion	—	Y	
M8-4	data-set-name	—	Y	
M8-5	data-reference	—	Y	
M8-6	BufTm	—	Y	
M8-7	IntgPd	—	Y	
M8-8	GI	—	Y	
M8-9	conf-revision	—	Y	

Logging

M9	Log control	—	N	
M9-1	IntgPd	—	N	
M10	Log	—	N	
M11	Control	—	Y	

If GSE (B31/32) is supported:

	Description	Client/Subscriber	Server/Publisher	Value/Comments
M12	GOOSE	—	N	
M13	GSSE	—	N	Deprecated

If SVC (B41/42) is supported:

	Description	Client/Subscriber	Server/Publisher	Value/Comments
M14	Multicast SVC	—	N	
M15	Unicast SVC	—	N	

For all IEDs:

	Description	Client/Subscriber	Server/Publisher	Value/Comments
M16	Time	—	Y	
M17	File transfer	—	N	

4 ACSI Service Conformance Statement

Server					
	ACSI Service	AA: TP/MC	Client/ Subscriber)	Server/ Publisher	Comments
S1	ServerDirectory	TP	—	Y	

Application association					
	ACSI Service	AA: TP/MC	Client/ Subscriber	Server/ Publisher	Comments
S2	Associate	TP	—	Y	
S3	Abort	TP	—	Y	
S4	Release	TP	—	Y	

Logical device					
	ACSI Service	AA: TP/MC	Client/ Subscriber	Server/ Publisher	Comments
S5	LogicalDeviceDirectory	TP	—	Y	

Logical node					
	ACSI Service	AA: TP/MC	Client/ Subscriber	Server/ Publisher	Comments
S6	GetLogicalNodeDirectory	TP	—	Y	
S7	GetAllDataValues	TP	—	Y	

Data					
	ACSI Service	AA: TP/MC	Client/ Subscriber	Server/ Publisher	Comments
S8	GetDataValues	TP	—	Y	
S9	SetDataValues	TP	—	Y	
S10	GetDataDirectory	TP	—	Y	
S11	GetDataDefinition	TP	—	Y	

Data set					
	ACSI Service	AA: TP/MC	Client/ Subscriber	Server/ Publisher	Comments
S12	GetDataSetValues	TP	—	Y	
S13	SetDataSetValues	TP	—	Y	
S14	CreateDataSet	TP	—	Y	Not applicable for reporting
S15	DeleteDataSet	TP	—	Y	
S16	GetDataSetDirectoy	TP	—	Y	

Setting group control					
	ACSI Service	AA: TP/MC	Client/ Subscriber	Server/ Publisher	Comments
S18	SelectActiveSG	TP	—	—	
S19	SelectEditSG	TP	—	—	
S20	SetEditSGValues	TP	—	—	
S21	ConfirmEditSGValues	TP	—	—	
S22	GetEditSGValues	TP	—	—	
S23	GetSGCBValues	TP	—	—	

Reporting

	ACSI Service	AA: TP/MC	Client/ Subscriber	Server/ Publisher	Comments
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Buffered Report Control Block (BRCB)

S24	Report	TP	—	Y	
S24-1	data-change (dchg)		—	Y	
S24-2	quality-change (qchg)		—	Y	
S24-3	data-update (dupd)	TP	—	N	
S25	GetBRCBValues	TP	—	Y	
S26	SetBRCBValues	TP	—	Y	

Unbuffered Report Control Block (URCB)

S27	Report	TP	—	Y	
S27-1	data-change (dchg)		—	Y	
S27-2	quality-change (qchg)		—	Y	
S27-3	data-update (dupd)	TP	—	N	
S28	GetURCBValues	TP	—	Y	
S29	SetURCBValues	TP	—	Y	

Logging

	ACSI Service	AA: TP/MC	Client/ Subscriber	Server/ Publisher	Comments
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Log Control

S30	GetLCBValues	TP	—	—	
S31	SetLCBValues	TP	—	—	

Log

S32	QueryLogByTime	TP	—	—	
S33	QueryLogAfter	TP	—	—	
S34	GetLogStatusValues	TP	—	—	

Generic substation event model (GSE)

	ACSI Service	AA: TP/MC	Client/ Subscriber	Server/ Publisher	Comments
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GOOSE

S35	SendGOOSEMessage	MC	—	—	
S36	GetGoReference	TP	—	—	
S37	GetGOOSEElementNumber	TP	—	—	
S38	GetGoCBValues	TP	—	—	
S39	SetGoCBValues	TP	—	—	

GSSE

S40	SendGSSEMessage	MC	—	—	
S41	GetGsReference	TP	—	—	
S42	GetGSSEDataOffset	TP	—	—	
S43	GetGsCBValues	TP	—	—	
S44	SetGsCBValues	TP	—	—	

Transmission of sampled value model (SVC)

	ACSI Service	AA: TP/MC	Client/ Subscriber	Server/ Publisher	Comments
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Multicast SVC

S45	SendMSVMessage	MC	—	—	
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Multicast Sampled Value Control Block

S46	GetMSVCBValues	TP	—	—	
S47	SetMSVCBValues	TP	—	—	

Unicast SVC

S48	SendUSVMessage	TP		—	
S49	GetUSVCBValues	TP	—	—	
S50	SetUSVCBValues	TP	—	—	

Control					
	ACSI Service	AA: TP/MC	Client/ Subscriber	Server/ Publisher	Comments
S51	Select	TP	—	Y	
S52	SelectWithValue	TP	—	Y	
S53	Cancel	TP	—	Y	
S54	Operate	TP	—	Y	
S55	Command-Termination	TP	—	Y	
S56	TimeActivated-Operate	TP	—	—	

File transfer					
	ACSI Service	AA: TP/MC	Client/ Subscriber	Server/ Publisher	Comments
S57	GetFile	TP	—	—	
S58	SetFile	TP	—	—	
S59	DeleteFile	TP	—	—	
S60	GetFileAttributeValues	TP	—	—	
S61	GetServerDirectory (FILE)	TP	—	—	

Time					
	ACSI Service	AA: TP/MC	Client/ Subscriber	Server/ Publisher	Comments
T1	Time resolution of internal clock		—	1ms	
T2	Time accuracy of internal clock		—	10ms	
T3	Supported TimeStamp resolution		—	1ms	