

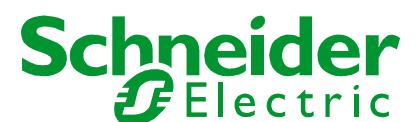
# MiCOM Px3x

## Technical Issues (Tissues)

### TICS

This document does not replace the Technical Manual

**Version:** TICS for Px3x Devices  
**Index:** D  
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## 1 IEC61850 Tissues Conformance Statement

### 1.1 Introduction

This document specifies the conformance level of MiCOM Px3x range products to the logged Technical Issues (Tissues) against the IEC61850 set of standards. This document, along with the PIXIT, defines the basis for conformance testing in accordance with part 10 of the IEC61850 standard specifications.

For more details on the logged Technical Issues, refer to the website:

<http://www.Tissues.iec61850.com>

### 1.2 Mandatory IntOp Tissues

During the October 2006 meeting, IEC TC57 Working Group 10 decided that:

- green Tissues with the category “IntOp” are mandatory for IEC 61850 Edition 1
- Tissues with the category “Ed.2” should not be implemented.

The table below gives an overview of the implemented IntOp Tissues and testing status.

Tissues 45, 46, 49, 190 and 278 are not mandatory, all other (technical) Tissues in the table are mandatory if applicable.

### 1.3 Document structure

This document is broken down into several sub-sections; one per part of the IEC61850 standard specifications.

Each subsection contains

- a list of tissue numbers that relate only to editorial or schema changes,
- a list of tissue numbers that are questions only (status = Blue)
- a table of the remaining Tissues that provides, for each tissue:
  - The TISSUE number
  - The subject of the TISSUE
  - The TISSUE category (IntOp only)
  - Indication if the TISSUE is supported

The supported column provides the following information:

Value	Meaning
✓	The TISSUE is implemented in the MiCOM Px3x relay.
x	The TISSUE has not been implemented in the MiCOM Px3x relay.
N/A	The TISSUE is not applicable to the MiCOM Px3x relay.
?	Support is not known or unclear for the TISSUE.

*Note: All Tissues whose status is other than Green will indicate a conformance status of ‘?’ and a supported status of ‘?’.*

## 2 Part 6 Standard

### 2.1 Specification scope

The scope of part 6 of the IEC61850 standards covers the configuration description language for communication in electrical substations related to IEDs.

### 2.2 Technical Issues

Num	Subject	Category	Comment	Supported
1	Syntax	IntOp		
5	tExtensionAttributeNameEnum is restricted	IntOp		
8	SIUnit enumeration for W	IntOp	-	*
9	Data Set reference in CBs	Ed2	-	✓
10	Base type for bitstring usage	IntOp	-	✓
17	DAI/SDI elements syntax	IntOp		
169	Ordering of enum differs from 7-3	IntOp	"Angld" enumeration is not used in the data model	N/A
272	Private section type	Ed2		✓
245	Attribute RptId in SCL	IntOp		
529	Replace sev - Unknown by unknown	IntOp		

## 3 Part 7-1 Standard

### 3.1 Specification scope

The scope of part 7-1 of the IEC61850 standards covers the architecture for communication and interactions between substation devices such as protection devices, breakers, transformers, substation hosts etc.

### 3.2 Technical Issues

At the time of writing there are no logged technical issues with the IntOp category against part 10.

## 4 Part 7-2 Standard

### 4.1 Specification scope

The scope of part 7-2 of the IEC61850 standards covers the layered substation communication architecture principles.

## 4.2 Technical Issues

Num	Subject	Category	Comment	Supported
30	control parameter T	IntOp		
31	Typo	IntOp		
32	Typo in syntax	IntOp		
35	Typo Syntax Control time	IntOp		✓
36	Syntax parameter DSet-Ref missing			
37	Syntax GOOSE "T" type	IntOp		✓
39	Add DstAddr to GoCB	IntOp		✓
40	GOOSE Message AppID to GoID	IntOp		✓
41	GsCB AppID to GsID	IntOp	Device has no GsCB.	N/A
42	SV timestamp: EntryTime to TimeStamp	IntOp	Device does not support Sampled Values	N/A
43	Control "T" semantic	IntOp		✓
44	AddCause - Object not sel	IntOp		✓
46	Synchro check cancel	IntOp	Not supported by the device	N/A
47	". " in LD Name?	IntOp	Logical Device names in the device are fixed and do not contain any '.' Characters.	✓
49	BRCB TimeOfEntry	IntOp		✓
50	LNName start with number	IntOp		✓
51	ARRAY [0..num] missing			
52	Ambiguity GOOSE SqNum	IntOp		✓
53	Add DstAddr to GsCB, SV	IntOp	Device does not support GsCB or SV control blocks	N/A
151	Name constraint for control blocks etc.	IntOp		
166	DataRef attribute in Log	IntOp		
185	Logging - Integrity period	IntOp		
189	SV Format	IntOp	Device does not support Sampled Values	N/A
190	BRCB: EntryId and TimeOfEntry	IntOp		?
191	BRCB: Integrity and buffering reports	IntOp		?
234	New type CtxInt	IntOp		?

Num	Subject	Category	Comment	Supported
275	Confusing statement on GI usage			
278	EntryId not valid for a server	IntOp		?
297	Sequence number	IntOp		?
298	Type of SqNum	IntOp		?
305	Reporting with BufTm=0	IntOp		?
322	Write Configuration attribute of BRCBs	IntOp		?
329	BRCB: Conditions for setting buffer overflow	IntOp		
333	Enabling of an incomplet GoCB	IntOp		
335	BRCB: Clearance of BufOvl flag	IntOp		
348	TimeOfEntry is independent of EntryId	IntOp		
349	TimeOfEntry has two definitions	IntOp		
453	Reporting & Logging model revision	IntOp		

## 5 Part 7-3 Standard

### 5.1 Specification scope

The scope of part 7-3 of the IEC61850 standards covers the abstract common data class definitions.

### 5.2 Technical Issues

Num	Subject	Category	Comment	Supported
28	Definition of APC	IntOp	The APC CDC is not used within the data model.	N/A
62	RMS and avg Values	IntOp	The device has not implemented RMS based measurements.	N/A
65	Deadband calculation of a Vector and trigger option	IntOp		✓
68	New CDC ACI	Ed2		
205	Device name plate - missing description "d" and "dU"	IntOp		✓
219	operTm in ACT	IntOp	OperTm not used. New attributes are optional and have not been implemented in the device data model	N/A

## 6 Part 7-4 Standard

### 6.1 Specification scope

The scope of part 7-4 of the IEC61850 standards covers the compatible Logical Node class and data class definitions.

### 6.2 Technical Issues

Num	Subject	Category	Comment	Supported
76	CBOpCap and SwOpCap	Ed2		✓
79	AutoRecSt and Lockout	Ed2	Updates to the RREC LN / enumARst enumeration are required along with a change to data model function Get_AR_Status().	✗

## 7 Part 8-1 Standard

### 7.1 Specification scope

The scope of part 8-1 of the IEC61850 standards covers the specific communication service mapping (SCSM) to the MMS protocol.

### 7.2 Technical Issues

Num	Subject	Category	Comment	Supported
114	Naming URCB	Ntp		✓
116	GetNameList with empty response	IntOp		
118	File directory	Ed2		✓
165	Improper Error Response for GetDataSetValues	IntOp		
183	GetNameList error handling	IntOp		
545	File directories	IntOp		

## 8 Part 9-1 Standard

### 8.1 Specification scope

The scope of part 9-1 of the IEC61850 standards covers the specific communication service mapping (SCSM) for sampled values over a serial unidirectional multidrop point to point link.

## 8.2 Technical Issues

The MiCOM Px3x relay does not support part 9-1 of the IEC61850 standards. Tissues relating to this part therefore do not affect the application implementation, hence not listed.

## 9 Part 9-2 Standard

### 9.1 Specification scope

The scope of part 9-2 of the IEC61850 standards covers the specific communication service mapping (SCSM) for sampled values over ISO/IEC 8802-3.

### 9.2 Technical Issues

The MiCOM Px3x relay does not support part 9-2 of the IEC61850 standards. Tissues relating to this part therefore do not affect the application implementation, hence not listed.

## 10 Part 10 Standard

### 10.1 Specification scope

The scope of part 10 of the IEC61850 standards covers the conformance testing of a device.

### 10.2 Technical Issues

At the time of writing there are no logged technical issues with the IntOp category against part 10.



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## Customer Care Centre

<http://www.schneider-electric.com/sites/corporate/en/support/contact/customer-care-contact.page>

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