



OpenFMB Gateway Certificate Level A<sup>1</sup>

No. << certificate number >>

Issued to:
<<TEST INITIATOR >>
<<FULL ADDRESS >>

For the Gateway product:
<<PRODUCT ID and NAME >>
<<VERSION >>
<<ADDITIONAL INFO >>

Issued by: <<test lab >>

The OpenFMB Gateway product has not been shown to be non-conforming to:
OpenFMB Gateway Test Procedures

The conformance test has been performed according to UCA International Users Group OpenFMB Gateway Test Procedures for Unified Modeling Language (UML) Platform Independent Model (PIM) Data Model 2.0.0.

These procedures have been approved by the UCA Interoperability Testing and Certification Authority and are implemented at an Accredited Testing Laboratory's test harness that demonstrates the interoperability framework ratified by the North American Energy Standards Board (NAESB) RMQ.26 Open Field Message Bus (OpenFMB) Model Business Practices.

The following conformance blocks have been tested with a positive result (number of relevant and executed test cases / total number of test cases):

Table with 2 columns and 12 rows listing tested modules: 1 Cyber Module (8/8), 2 Breaker Module (8/8), 3 Capbank Module (10/10), 4 ESS Module (8/8), 5 Generation Module (10/10), 6 Load Module (8/8), 7 Meter Module (2/2), 8 Recloser Module (8/8), 9 Regulator Module (10/10), 10 Resource Module (8/8), 11 Solar Module (8/8), 12 Switch Module (8/8)

This Certificate includes a summary of test results from Test Procedures:
OpenFMBGatewayTestProcedures-20210623a.docx
OpenFMBPublish-SubscribeCyberValidatorTestProcedures-20210623a.docx
as carried out at <<COMPANY >> in <<COUNTRY >> with <<Test Harness >> <<VERSION >> and configuration:

Table with 2 columns: Configuration and Mandatory. Rows include Device Protocol (Both DNP3 and Modbus), Publish-Subscribe Protocol (<< One of MQTT or NATS >>), and UML Platform Independent Model (PIM) Version (2.0.0)

This document has been issued for information purposes only, and the original paper copy of the <<TESTLAB >> report: No. <<TESTREPORT NUMBER >> will prevail. The test has been carried out on one single specimen of the product as referred above and submitted to <<TESTLAB >> by <<TEST INITIATOR >>. The manufacturer's production process has not been assessed. This certificate does not imply that <<TESTLAB >> has certified or approved any product other than the specimen tested.

<<CITY >>, <<DATE >>

<<Manager NAME >> <<Tester NAME >>
<<JOB TITLE >> <<JOB TITLE >>

1 Level A - Independent Test lab with certified ISO/IEC 17025 Quality System

Applicable OpenFMB version 2.0 UML Platform Independent Model Test Procedures

Conformance Block	Mandatory Test Procedures (Each conducted twice: DNP3/Modbus)	Conditional Test Procedures
1: Cyber Module	Authentication Authorization Integrity Confidentiality	
2: Breaker Module	BreakerDiscreteControlProfile BreakerEventProfile BreakerReadingProfile BreakerStatusProfile	
3: Capbank Module	CapbankControlProfile CapbankDiscreteControlProfile CapbankEventProfile CapbankReadingProfile CapbankStatusProfile	
4: ESS Module	ESSControlProfile ESSEventProfile ESSReadingProfile ESSStatusProfile	
5: Generation Module	GenerationControlProfile GenerationDiscreteControlProfile GenerationEventProfile GenerationReadingProfile GenerationStatusProfile	
6: Load Module	LoadControlProfile LoadEventProfile LoadReadingProfile LoadStatusProfile	
7: Meter Module	MeterReadingProfile	
8: Recloser Module	RecloserDiscreteControlProfile RecloserEventProfile RecloserReadingProfile RecloserStatusProfile	
9: Regulator Module	RegulatorControlProfile RegulatorDiscreteControlProfile RegulatorEventProfile RegulatorReadingProfile RegulatorStatusProfile	
10: Resource Module	ResourceDiscreteControlProfile ResourceEventProfile ResourceReadingProfile ResourceStatusProfile	
11: Solar Module	SolarControlProfile SolarEventProfile SolarReadingProfile SoladStatusProfile	
12: Switch Module	SwitchDiscreteControlProfile SwitchEventProfile SwitchReadingProfile SwitchStatusProfile	