

***Protocol Implementation
Conformance Statement
(PICS)***

<i>Vendor Name:</i>	<i>Frimat GmbH</i>
<i>Vendor ID:</i>	<i>474</i>
<i>Product Name:</i>	<i>Frimat-BAVI</i>
<i>Product Model Number:</i>	<i>n/a</i>
<i>Applications Software Version:</i>	<i>17.8.1</i>
<i>Firmware Revision:</i>	<i>n/a</i>
<i>BACnet Protocol Revision:</i>	<i>1.15</i>

Document ID:	BAVI PICS – Pics_BAVI_2018.doc
Directory:	
Revision date:	August 2018
Revision:	
General status:	

Product Description:

The Frimat-BAVI offers two operation modes.

- 1) BACnet Advanced Operator Workstation (B-AWS), suitable for configuring BACnet servers.
- 2) Standard SCADA operation, providing a graphical, intuitive user interface in order to allow the end user to easily access and operate the plant. Data sharing, scheduling, alarming and trending services are fully integrated.

The client implementation is based on the CS-Lab Stack.

BACnet Standardized Device Profile (Annex L):

- BACnet Advanced Operator Workstation (B-AWS)
- BACnet Operator Workstation (B-OWS)
- BACnet Operator Display (B-OD)
- BACnet Advanced Lighting Workstation (B-ALWS)
- BACnet Lighting Operator Display (B-LOD)
- BACnet Building Controller (B-BC)
- BACnet Advanced Application Controller (B-AAC)
- BACnet Application Specific Controller (B-ASC)
- BACnet Smart Sensor (B-SS)
- BACnet Smart Actuator (B-SA)
- BACnet Advanced Lighting User Interface (B-ALUI)
- BACnet General Lighting User Interface (B-GLUI)
- BACnet Simple Lighting User Interface (B-SLUI)
- BACnet Analog Lighting Device (B-ALD)
- BACnet Binary Lighting Device (B-BLD)
- BACnet Lighting Supervisory Device (B-LSD)

List all BACnet Interoperability Building Blocks Supported (Annex K):

Data Sharing	Alarms & Events	Scheduling	Trending	Device Management
DS-COV-A	AE-ACK-A	SCHED-AVM-A	T-V-A	DM-DDB-A / B
DS-COVP-A	AE-N-A	SCHED-VM-A	T-AVM-A	DM-DOB-A / B
DS-RP-A / B	AE-ELV-A	SCHED-WS-A	T-ATR-A	DM-DCC-A
DS-RPM-A / B	AE-ELVM-A			DM-LM-A
DS-WP-A	AE-VN-A			DM-RD-A
DS-WPM-A	AE-VM-A			DM-OCD-A
DS-V-A	AE-AVN-A			DM-ANM-A
DS-AV-A	AE-AVM-A			DM-ADM-A
DS-M-A	AE-AS-A			DM-MTS-A
DS-AM-A				DM-BR-A

Segmentation Capability:

- Segmented requests supported
- Segmented responses supported

Window Size: configurable
Window Size: configurable

Standard Object Types supported:

Object-Type	Object-Type supported	Dynamically creatable / deletable
Accumulator	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Alert Enrollment	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Analog Input	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Analog Output	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Analog Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Averaging	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Binary Input	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Binary Output	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Binary Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bitstring Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Calendar	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Channel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Character String Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Command	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Date Pattern Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Date Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DateTime Pattern Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DateTime Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Device	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Event-Enrollment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
EventLog	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
File	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Group	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Global Group	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Integer Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Large Analog Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Load Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Loop	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Multi-State Input	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Multi-State Output	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Multi-State Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Object-Type	Object-Type supported	Dynamically creatable / deletable
Network Security	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Notification Class	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Notification Forwarder	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Octet String Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Positive Integer Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pulse Converter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schedule	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Structured View	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Time Pattern Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Time Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TrendLog	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
TrendLog Multiple	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Lighting Output	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Data Link Layer Options:

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device
- ISO 8802-3, Ethernet (Clause 7)
- ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
- ATA 878.1, EIA-485 ARCNET (Clause 8), baud rate(s):
- MS/TP master (Clause 9), baud rate(s):
- MS/TP slave (Clause 9), baud rate(s):
- Point-to-Point, EIA 232 (Clause 10), baud rate(s):
- Point-to-Point, modem (Clause 10), baud rate(s):
- Lon Talk, (Clause 11), medium:
- BACnet/Zigbee (Annex O)
- Other:

Device Address Binding:

Is static device binding supported? (This is currently necessary for two-way communication with MS/TP slaves and certain other devices.) Yes No

Network Options:

- Router, Clause 6 – List all routing configurations, e.g. ARCNET-Ethernet, Ethernet-MS/TP, etc.
- Annex H, BACnet Tunneling Router over IP
- BACnet/IP Broadcast Management Device (BBMD)
 - Does the BBMD support registrations by Foreign Devices? Yes No
 - Does the BBMD support network address translation? Yes No

Network Security Options:

- Non-secure Device – is capable of operating without BACnet Network Security
- Secure Device – is capable of using BACnet Network Security (NS-SD BIBB)
 - Multiple Application-specific keys:
 - Supports encryption (NS-ED BIBB)
 - Key Server (NS-KS BIBB)

Character Sets Supported:

Indicating support for multiple character sets does not imply that they can all be supported simultaneously.

- | | | |
|-------------------------------------------------------|-----------------------------------------------|-------------------------------------|
| <input checked="" type="checkbox"/> ISO 10646 (UTF-8) | <input type="checkbox"/> IBM™/Microsoft™ DBCS | <input type="checkbox"/> ISO 8859-1 |
| <input type="checkbox"/> ISO 10646 (UCS-2) | <input type="checkbox"/> ISO 10646 (UCS-4) | <input type="checkbox"/> JIS X 0208 |

If this product is a communication gateway, describe the types of non-BACnet equipment / networks(s) that the gateway supports:

***Frimat GmbH
Gebäude- und Prozessleittechnik
Dr.-von-Rieppel-Straße 2
92637 Weiden***

***Telefon: 0961/634700-0
Telefax: 0961/634700-71
e-mail: info@frimat.de
Internet: www.frimat.de***