ANNEX A - PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (NORMATIVE)

BACnet Protocol Implementation Conformance Statement

Date: April 24, 2009   **Revision**: 1.4
Vendor Name: Opera Electronics Inc.
Product Name: GAS Detector
Product Model Number: Opera 5000
Applications Software Version: BA3   **Firmware Revision:** 1B01   **BACnet Protocol Revision:** 5

Product Description:

The Opera 5000 is an indoor air quality sensor. In terms of the BACnet protocol is an end device.

BACnet Standardized Device Profile (Annex L):

☐   **BACnet Operator Workstation (B-OWS)**
☐   **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)**

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

Data Sharing – Read Property – B   DS-RP-B
Data Sharing – Write Property – B   DS-WP-B
Device Management – Dynamic Device Binding   DM-DDB-B

Segmentation Capability:

☐   Segmented requests supported   Window Size
☐   Segmented responses supported   Window Size

Standard Object Types Supported:

- ☐ Analog Input
- ☐ Analog Output
- ☒ Analog Value
- ☐ Averaging
- ☐ Binary Input
- ☐ Binary Output
- ☐ Binary Value
- ☐ Calendar
- ☐ Command
- ☒ Device
- ☐ Event Enrollment
- ☐ File
- ☐ Group
- ☐ Life Safety Point
- ☐ Life Safety Zone
- ☐ Loop
- ☐ Multistate Input
- ☐ Multistate Output
- ☒ Multistate Value
- ☐ Notification Class
- ☐ Program
- ☐ Schedule
- ☐ Trend Log

Analog Value:			
Dynamically Creatable	Dynamically Deletable	Optional Properties Supported	Writable Properties
☐	☐		

Multistate Value:			
Dynamically Creatable	Dynamically Deletable	Optional Properties Supported	Writable Properties
☐	☐		

Device:			
Dynamically Creatable	Dynamically Deletable	Optional Properties Supported	Writable Properties
☐	☐		Max Master Object Identifier

Data Link Layer Options:

☐ BACnet IP, (Annex J)
☐ BACnet IP, (Annex J), Foreign Device
☐ ISO 8802-3, Ethernet (Clause 7)
☐ ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
☐ ANSI /ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s)
☒ MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 76800
☐ 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):
☐ LonTalk, (Clause 11), medium:
☐ 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

Networking 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

Character Sets Supported:

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

☒ ANSI X3.4   ☐ IBM™/Microsoft™ DBCS   ☐ ISO 8859-1
☐ ISO 10646 (UCS-2)   ☐ ISO 10646 (UCS-4)   ☐ JIS C 6226

Object Table

Object Name	Type and Instance	Object Property	Parameter
GAS Reading Sensor 1	AV 0	Present_Value (R)	Gas reading
GAS Reading Sensor 2	AV 1*	Present_Value (R)	Gas reading
Ambient Temperature	AV 2	Present_Value (R)	Temperature in Celsius
Sensor 1 Type	MSV 0	Present_Value (R)	Sensor Gas type
Sensor 1 Scale	MSV 1	Present_Value (R)	Sensor scaling information
Sensor 2 Type	MSV 2*	Present_Value (R)	Sensor Gas type
Sensor 2 Scale	MSV 3*	Present_Value (R)	Sensor scaling information

*Only available if a second sensor is fitted.