

## BACNET Protocol Implementation Conformance Statement

**Date:** 25.02.2020 r.

**Vendor Name:** LUMEL S.A.

**Vendor ID number:** 1038

**Product Name:** ND25

**Product Model Number:** 1.0

**Application Software Version:** 0.8

**Firmware Revision:** 1.4

**BACnet Protocol Revision:** 12

### Product Description:

Power Network Meter.

### BACnet Standardized Device Profile (Annex L):

BACnet Application Specific Controller (B-ASC)

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

Data Sharing	Device Management
ReadProperty-B (DS-RP-B)	TimeSynchronization-B (DM-TS-B)
ReadPropertyMultiple-B (DS-RPM-B)	Dynamic Device Binding-B (DM-DDB-B)
WriteProperty-B (DS-WP-B)	
WritePropertyMultiple-B (DS-WPM-B)	

### Standard Object Types Supported:

#### Device Object Type

1. Dynamically creatable using the CreateObject service? NO
2. Dynamically deletable using the DeleteObject service? NO
3. List of the optional properties supported:
  - Location,
  - Description.
4. Properties saved to non-volatile memory:
  - Device Name,
  - Object Instance Number,
  - Location,
  - Description.

#### Analog Input Object Type

1. Dynamically creatable using the CreateObject service? NO
2. Dynamically deletable using the DeleteObject service? NO
3. List of the optional properties supported:
  - Description.

4. List of chosen properties:

<b>Object Instance Number</b>	<b>Object Name</b>	<b>Description</b>	<b>Unit</b>
0	U1	L1 Phase Voltage	VOLTS
1	U2	L2 Phase Voltage	VOLTS
2	U3	L3 Phase Voltage	VOLTS
3	I1	L1 Phase Current	AMPERES
4	I2	L2 Phase Current	AMPERES
5	I3	L3 Phase Current	AMPERES
6	W1	L1 Phase Active Power	WATTS
7	W2	L2 Phase Active Power	WATTS
8	W3	L3 Phase Active Power	WATTS
9	VA1	L1 Phase Apparent Power	VOLT AMPERES
10	VA2	L2 Phase Apparent Power	VOLT AMPERES
11	VA3	L3 Phase Apparent Power	VOLT AMPERES
12	VAR1	L1 Phase Reactive Power	VOLT AMPERES REACTIVE
13	VAR2	L2 Phase Reactive Power	VOLT AMPERES REACTIVE
14	VAR3	L3 Phase Reactive Power	VOLT AMPERES REACTIVE
15	PF1	L1 Phase Power Factor	NO UNIT
16	PF2	L2 Phase Power Factor	NO UNIT
17	PF3	L3 Phase Power Factor	NO UNIT
18	PA1	L1 Phase Angle	DEGREES ANGULAR
19	PA2	L2 Phase Angle	DEGREES ANGULAR
20	PA3	L3 Phase Angle	DEGREES ANGULAR
21	UAvg	Voltage Average	VOLTS
22	USum	Voltage Sum	VOLTS
23	IAvg	Current Average	AMPERES
24	ISum	Current Sum	AMPERES
25	WAvG	Active Power Average	WATTS
26	WSum	Active Power Sum	WATTS
27	VAAvg	Apparent Power Average	VOLT AMPERES
28	VASum	Apparent Power Sum	VOLT AMPERES
29	VARAvg	Reactive Power Average	VOLT AMPERES REACTIVE
30	VARSum	Reactive Power Sum	VOLT AMPERES REACTIVE
31	PFAvg	Power Factor Average	NO UNIT
32	PFSum	Power Factor Sum	NO UNIT
33	PAAvg	Phase Angle Average	DEGREES ANGULAR
34	PASum	Phase Angle Sum	DEGREES ANGULAR
35	f	Frequency	HERTZ
36	WDMDI	Active Import Demand	WATTS
37	WDMDI max	Active Import Demand max	WATTS
38	WDMDE	Active Export Demand	WATTS
39	WDMDE max	Active Export Demand max	WATTS
40	VARMDI	Reactive Capacitive Demand	VOLT AMPERES REACTIVE
41	VARMDI max	Reactive Capacitive Demand	VOLT AMPERES REACTIVE
42	VARMDI	Reactive Inductive Demand	VOLT AMPERES REACTIVE
43	VARMDI max	Reactive Inductive Demand max	VOLT AMPERES REACTIVE
44	VADMD	Apparent Demand	VOLT AMPERES

45	VADMD max	Apparent Demand max	VOLT AMPERES
46	ADMD	Current Demand	AMPERES
47	ADMD max	Current Demand max	AMPERES
48	kWhI OFC	Active import Energy Overflow count	NO UNIT
49	kWhI	Active import Energy	KILOWATT HOURS
50	kWhE OFC	Active export Energy Overflow count	NO UNIT
51	kWhE	Active export Energy	KILOWATT HOURS
52	kVArhC OFC	Reactive Capacitive Energy Overflow count	NO UNIT
53	kVArhC	Reactive Capacitive Energy	KILOVOLTAMPERE HOURS REACTIVE
54	kVArhI OFC	Reactive Inductive Energy Overflow count	NO UNIT
55	kVArhI	Reactive Inductive Energy	KILOVOLTAMPERE HOURS REACTIVE
56	kVAh OFC	Apparent Energy Overflow count	NO UNIT
57	kVAh	Apparent Energy	KILOVOLTAMPERE HOURS
58	UMax	System Voltage Max	VOLTS
59	UMin	System Voltage Min	VOLTS
60	RPM	Rotations Per Minute	NO UNIT
61	Imp Rate	Impulse per unit of Energy	NO UNIT
62	IMax	System Current Max	AMPERES
63	IMin	System Current Min	AMPERES
64	U12	L12 Voltage	VOLTS
65	U23	L23 Voltage	VOLTS
66	U31	L31 Voltage	VOLTS
67	THD U1	Voltage THD L1	PERCENT
68	THD U2	Voltage THD L2	PERCENT
69	THD U3	Voltage THD L3	PERCENT
70	THD I1	Current THD L1	PERCENT
71	THD I2	Current THD L2	PERCENT
72	THD I3	Current THD L3	PERCENT
73	SYS THD U	System Voltage THD	PERCENT
74	SYS THD I	System Current THD	PERCENT
75	INeu	Neutral Current	AMPERES

**Data Link Layer Options:**

BACnet IP, (Annex J)

**Character Sets Supported:**

ANSI X3.4 (UTF-8)

**Segmented messages:**

Not Supported