## Square D Powerlink G3 Controller

**BACnet Protocol Implementation Conformance Statement**

### BACNET PROTOCOL IMPLEMENTATION CONFORMANCE

<table>
<thead>
<tr>
<th>Date</th>
<th>03/15/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor Name</td>
<td>Square D Company</td>
</tr>
<tr>
<td>Product Name</td>
<td>Powerlink G3 Lighting Controller</td>
</tr>
<tr>
<td>Product Model Number</td>
<td>NF2000G3, NF3000G3, NF3000G3C</td>
</tr>
<tr>
<td>Applications Software Version</td>
<td>NF2000G3, NF3000G3 – Program Module 5.21, NF3000G3C – Program Module 5.61</td>
</tr>
<tr>
<td>Firmware Revision</td>
<td>NF2000G3, NF3000G3 – Download Module 2.00, Boot Module 1.51, NF3000G3C – Download Module 2.50, Boot Module 1.51</td>
</tr>
<tr>
<td>BACnet Protocol Revision</td>
<td>2</td>
</tr>
<tr>
<td>Product Description</td>
<td>The Powerlink G3 Lighting Controller performs schedule-based and input-based control of motorized breakers installed in a standard NF panelboard. Each controller supports 16 hard-wired inputs (64 via software command), 64 zones of control, and 336 breakers distributed across 16 control buses (up to 21 breakers each). Model specific features include: NF2000G3: Ethernet communications, shared remote sources, network time synchronization. NF3000G3: Email upon alarm, onboard web pages for status/control/configuration. NF3000G3C: C-Bus communications (ability to interface with Clipsal C-Bus lighting control network)</td>
</tr>
</tbody>
</table>

### BACnet Standardized Device Profile (Annex L)

<table>
<thead>
<tr>
<th>Profile</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>(X) BACnet Application Specific Controller (B-ASC)</td>
<td></td>
</tr>
<tr>
<td>(X) BACnet Smart Sensor (B-SS)</td>
<td></td>
</tr>
<tr>
<td>(X) BACnet Smart Actuator (B-SA)</td>
<td></td>
</tr>
</tbody>
</table>

### BACnet Interoperability Building Blocks Supported (Annex K)

<table>
<thead>
<tr>
<th>Building Block</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Sharing-ReadProperty-B (DS-RP-B)</td>
<td></td>
</tr>
<tr>
<td>Data Sharing-WriteProperty-B (DS-WP-B)</td>
<td></td>
</tr>
<tr>
<td>Data Sharing-WritePropertyMultiple-B (DS-WPM-B)</td>
<td></td>
</tr>
<tr>
<td>Device Management-Dynamic Device Binding-B (DM-DDB-B)</td>
<td></td>
</tr>
<tr>
<td>Device Management-Dynamic Object Binding-B (DM-DDO-B)</td>
<td></td>
</tr>
<tr>
<td>Device Management-DeviceCommunicationControl-B (DM-DOC-B)</td>
<td></td>
</tr>
<tr>
<td>Device Management-TimeSynchronization-B (DM-TS-B)</td>
<td></td>
</tr>
<tr>
<td>Device Management-UTCTimeSynchronization-B (DM-UTC-B)</td>
<td></td>
</tr>
<tr>
<td>Device Management-ReinitializeDevice-B (DM-RD-B)</td>
<td></td>
</tr>
</tbody>
</table>

### Segmentation Capability

<table>
<thead>
<tr>
<th>Capability</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>(X) Able to transmit segmented messages (Window Size: N/A)</td>
<td></td>
</tr>
<tr>
<td>(X) Able to receive segmented messages (Window Size: N/A)</td>
<td></td>
</tr>
</tbody>
</table>

### Standard Object Types Supported

#### A. Device Object Type

1. Dynamically creatable using the CreateObject service – NO.
2. Dynamically deletable using the DeleteObject service – NO.
3. Optional properties supported – Description, Local_Time, Local_Date, UTC_Offset, Daylight_Savings_Status, Max_Master, Max_Info_Frames.
4. Properties that are writable where not otherwise required by this standard – NONE.
5. Proprietary properties – NONE.
6. Property range restrictions – NONE

#### B. Binary Value Object Type

1. Dynamically creatable using the CreateObject service – NO.
2. Dynamically deletable using the DeleteObject service – NO.
3. Optional properties supported – Description, Reliability (Zone Status, Breaker Status, Control Bus Status).
4. Properties that are writable where not otherwise required by this standard – NONE.
5. Proprietary properties – NONE.
6. Property range restrictions – NONE

#### C. Analog Value Object Type

1. Dynamically creatable using the CreateObject service – NO.
2. Dynamically deletable using the DeleteObject service – NO.
3. Optional properties supported – Description, Reliability.
4. Properties that are writable where not otherwise required by this standard – NONE.
5. Proprietary properties – NONE.
6. Property range restrictions – NONE

#### D. Multi-state Value Object Type

1. Dynamically creatable using the CreateObject service – NO.
2. Dynamically deletable using the DeleteObject service – NO.
3. Optional properties supported – Description, Reliability (Zone Control), State_Text, Priority_Array, Relinquish_Default.
4. Properties that are writable where not otherwise required by this standard – Present_Value.
5. Proprietary properties – NONE.
6. Property range restrictions – Present_Value: 1 – 4 (Input Control), 1 – 3 (Zone Control).
### E. Multi-state Output Object Type

1. Dynamically creatable using the CreateObject service – NO.
2. Dynamically deletable using the DeleteObject service – NO.
3. Optional properties supported – Description, Device_Type, Reliability, State_Text.
4. Properties that are writable where not otherwise required by this standard – NONE.
5. Proprietary properties – NONE.
6. Property range restrictions – Present_Value: 1 – 3 (Breaker Control).

### Data Link Layer Options

- (X) BACnet IP, (Annex J)
- (X) 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, EIA-485 ARCNET (Clause 8), baud rate(s) __________
- (X)* 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  (X) No

### Networking Options

- ( ) Router, Clause 8 - 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

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

### Communication Gateway

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

N/A

(X) = supports; ( ) = does not support

¹ NF2000G3 and NF3000G3 only; the NF3000G3C serial port is dedicated to C-Bus communications.

² Version shown or greater

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**Support and Service**

Contact the Square D Customer Information Center for technical support by phone at 1-888-Square D (1-888-778-2733) or e-mail at lightingcontrol.support@us.schneider-electric.com.

Contact your local Square D service representative for repairs or service to your network.

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