

## Square D Powerlink G3 Controller

### BACnet Protocol Implementation Conformance Statement

#### BACNET PROTOCOL IMPLEMENTATION CONFORMANCE

**Table 1: BACnet Protocol Implementation Conformance**

Date	03/15/08
Vendor Name	Square D Company
Product Name	Powerlink G3 Lighting Controller
Product Model Number	NF2000G3, NF3000G3, NF3000G3C
Applications Software Version <sup>2</sup>	NF2000G3, NF3000G3 – Program Module 5.21, NF3000G3C – Program Module 5.61
Firmware Revision <sup>2</sup>	NF2000G3, NF3000G3 – Download Module 2.00, Boot Module 1.51 NF3000G3C – Download Module 2.50, Boot Module 1.51
BACnet Protocol Revision	2
Product Description	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)
BACnet Standardized Device Profile (Annex L)	( ) BACnet Operator Workstation (B-OWS) ( ) BACnet Building Controller (B-BC) ( ) BACnet Advanced Application Controller (B-AAC) (X) BACnet Application Specific Controller (B-ASC) ( ) BACnet Smart Sensor (B-SS) ( ) BACnet Smart Actuator (B-SA)
BACnet Interoperability Building Blocks Supported (Annex K)	Data Sharing-ReadProperty-B (DS-RP-B) Data Sharing-ReadPropertyMultiple-B (DS-RPM-B) Data Sharing-WriteProperty-B (DS-WP-B) Data Sharing-WritePropertyMultiple-B (DS-WPM-B) Device Management-Dynamic Device Binding-B (DM-DDB-B) Device Management-Dynamic Object Binding-B (DM-DOB-B) Device Management-DeviceCommunicationControl-B (DM-DCC-B) Device Management-TimeSynchronization-B (DM-TS-B) Device Management-UTCTimeSynchronization-B (DM-UTC-B) Device Management-ReinitializeDevice-B (DM-RD-B)
Segmentation Capability	( ) Able to transmit segmented messages (Window Size: N/A) ( ) Able to receive segmented messages (Window Size: N/A)
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).

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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	<input checked="" type="checkbox"/> BACnet IP, (Annex J) <input checked="" type="checkbox"/> BACnet IP, (Annex J), Foreign Device <input type="checkbox"/> ISO 8802-3, Ethernet (Clause 7) <input type="checkbox"/> ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8) <input type="checkbox"/> ANSI/ATA 878.1, EIA-485 ARCNET (Clause 8), baud rate(s) _____ <input checked="" type="checkbox"/> MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 76800 <input type="checkbox"/> MS/TP slave (Clause 9), baud rate(s): _____ <input type="checkbox"/> Point-To-Point, EIA 232 (Clause 10), baud rate(s): _____ <input type="checkbox"/> Point-To-Point, modem, (Clause 10), baud rate(s): _____ <input type="checkbox"/> LonTalk, (Clause 11), medium: _____ <input type="checkbox"/> 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 <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Networking Options	<input type="checkbox"/> Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc. <input type="checkbox"/> Annex H, BACnet Tunneling Router over IP <input type="checkbox"/> BACnet/IP Broadcast Management Device (BBMD) Does the BBMD support registrations by Foreign Devices <input type="checkbox"/> Yes <input type="checkbox"/> No
Character Sets Supported	Indicating support for multiple character sets does not imply that they can all be supported simultaneously. <input checked="" type="checkbox"/> ANSI X3.4 <input type="checkbox"/> ISO 10646 (UCS-2) <input type="checkbox"/> IBM™/Microsoft™ DBCS <input type="checkbox"/> ISO 10646 (UCS-4) <input type="checkbox"/> ISO 8859-1 <input type="checkbox"/> 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

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

<sup>2</sup> Version shown or greater


**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](mailto:lightingcontrol.support@us.schneider-electric.com).

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

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