# PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT

#### **BASIC INFORMATION**

Document Revision:	1.06
Issue Date:	26th September 2016
Vendor Name:	Red Lion Controls
Product Name:	All Products Using Crimson 2.0 or Crimson 3.0 BACnet Slave Drivers
Product Model Numbers:	G3 Series of HMI. Data Station Plus Series and Modular Controller Series
Firmware Revision:	Crimson 2.0 Build 2.0.0.324 and Later and All Builds of Crimson 3.0
BACnet Protocol Revision:	Version 1, Revision 5
Product Description:	The products are advanced data-management devices that perform protocol conversion and data logging, and also provide a web-based virtual HMI facility. The G3 HMI products combine this functionality with color touchscreens for local viewing. The products support BACnet slave and master modes, over MS/TP, 802.3 and UDP/IP.
	*While BACnet is a peer to peer protocol, the Red Lion Controls implementation configures as a Master (client) or Slave (server).

#### BACNET STANDARDIZED DEVICE PROFILE (ANNEX L)

- ✓ B-ASC BACnet Application Specific Controller
- ✓ B-SS BACnet Smart Sensor
- ✓ B-SA BACnet Smart Actuator

## BACNET INTEROPERABILITY BUILDING BLOCKS SUPPORTED (ANNEX K)

- ✓ DS-RP-B
   ✓ DS-RPM-B
   ✓ DS-WP-B
   ✓ DM-DDB-B
   ✓ DM-DOB-B
   ✓ DM-DOB-B
- ✓ DM-DCC-B Device Management, Device Communication Control, B
- ✓ DM-RD-B Device Management, Reinitialize Device, B

## STANDARD OBJECT TYPES

The following object types are supported...

- Analog Input, Analog Output, Analog Value
- Binary Input, Binary Output, Binary Value
- Device

The following conditions apply to all object types...

- Objects may be neither dynamically created nor deleted.
- No proprietary properties are implemented.
- No properties may be written unless required by the BACnet specification.
- No properties have range restrictions beyond those in the BACnet specification.

The only optional properties support are on the Device object and are as follows...

- Local\_Time
- Local\_Date

## SEGMENTATION CAPABILITY

Segmentation is not supported.

## DATA LINK LAYER OPTIONS

- ✓ BACnet IP (Annex J)
- ✓ ISO 8802-3 Ethernet (Clause 7)
- ✓ MS/TP Master (Clause 9) at 9600, 19200, 38400 and 78400 Baud.
- ✓ MS/TP Slave (Clause 9) at 9600, 19200, 38400 and 78400 Baud.

## DEVICE ADDRESS BINDING

Static address binding is not supported.

#### **NETWORKING OPTIONS**

No networking options are supported.

## CHARACTER SETS SUPPORTED

✓ ANSI X3.4

## GATEWAY FUNCTIONALITY

The BACnet implementation is capable of exposing, and accepting writes to, any data items gathered from communications devices compatible with the Crimson runtime software. Data items may be exposed as any of the standard analog or binary object types. The list of available drivers is available from Red Lion's website.

#### **REVISION HISTORY**

Not Provided.