

Emerson Process ROC Protocol Serial Master Driver v2.0

Information Sheet for Crimson v3.0+

Compatible Devices

FloBoss 103/104 Series
ROC800

Verified Device

FloBoss 103
ROC800

Overview

The Emerson FloBoss/ROC serial communications driver is intended to ultimately support all Emerson FloBoss/ROC devices. At this time it can be used with any FloBoss/ROC device provided that the devices implementation of the specified operations is consistent with that of the FloBoss 100 series or ROC800. For full support of any other ROC protocol device, please contact Red Lion technical support.

Please review the following information to achieve successful communications.

Device Configuration

A security section is provided within the device configuration area in Crimson. Please specify the Operator ID and Password that the Red Lion device should use when communicating with the Emerson device. Also, indicate the Access Level if this security feature should be used.

Accessing Data

A TLP selection dialog box is available in Crimson which reveals the following details for each TLP: short name, numeric TLP designation and data type. Please review the following notes for successful data access.

Data types of type "TLP" should be assigned to a numeric data tag and should be interpreted as follows: XXTLLPP, where XXTLLPP is an eight digit hexadecimal number. TT is the Point Type, LL is the Logical Number and PP is the Parameter Number.

When accessing items with a data type of "String", the item should be assigned to a string tag and the tags Packing should be set to ASCII Big-Endian. Care should be taken when writing to string items. In the event that the current string value contains the same first 4 or more characters as the desired string value, the string should be cleared before writing the desired string. String support is provided for lengths up to 60 characters.

Please use Crimson's Time and Data primitive when displaying the target devices Time (Parameter 8 of Point Type 12, Parameter 7 of Point Type 136).

Cable Information

G3 RS232 Port	FloBoss 103 LOI Port
2 - Rx	Tx
5 - Tx	Rx
3,4 - Common	5 - Common

G3 RS232 Port	ROC800 CPU RS232C COM2 Port
2 - Rx	2 - Tx
5 - Tx	1 - Rx
3,4 - Common	5 - Common

Revision History

- 06/28/11 – Created
- 07/15/11 – Updated Accessing Data (strings).
- 10/11/11 – Added ROC800 device support.
- 11/14/11 – Updated ROC800 information in Overview and Accessing Data sections.
- 01/28/13 – Updated title.