D301837X012 Form A6225 January 2016

# Fast History Program User Manual (For the ROC800-Series) QER 07Q019

ROCLINK 800 - [FastHistory - Remote Oprtns Cntrlr]		
Eile Edit View ROC Configure Meter Utilities Tools Window Help		- 8 ×
	¥   ⊔ 🗗   ? №	
Information Setup Configuration Logging Interval 250ms ▼ Enable Logging Status Values Value of Packed Bytes 0 Status 1 Undefined 0 Status 2 Undefined 0 Status 3 Undefined 0 Status 4 Undefined 0 Status 5 Undefined 0 Status 6 Undefined 0 Status 7 Undefined 0 Status 8 Undefined 0	Process Data         Data 1       Undefined        0.0         Data 2       Undefined        0.0         Data 3       Undefined        0.0         Data 4       Undefined        0.0         Data 5       Undefined        0.0         Data 6       Undefined        0.0         Data 7       Undefined        0.0         Data 8       Undefined        0.0         Data 9       Undefined        0.0         Data 10       Undefined        0.0         Data 11       Undefined        0.0         Data 12       Undefined        0.0         Data 13       Undefined        0.0         Data 14       Undefined        0.0         Data 13       Undefined        0.0	
1	Print Save As Auto Scan Dupdate Close	<u>  ! Apply</u>
	ON-LIN	E 10:43 PM



**Remote Automation Solutions** 

#### Revision Tracking Sheet Jan-2016

This manual may be revised from time to time to incorporate new or updated information. The revision date of each page appears at the bottom of the page opposite of the page number. A change in revision date to any page also changes the date that appears on the front cover of the manual. Listed below is the revision date of each page.

Page	Revision					
All pages	Jan-2016					
All pages	May-2015					
All pages	Mar-2012					
Initial release	Feb-2007					

# Contents

Chapter 1 – Introduction	1
1.1 Scope and Organization	1
1.2 Product Overview	1
1.3 Program Requirements	2
1.3.1 License Keys	3
Chapter 2 – Installation	5
2.1 Installing the License Key	5
2.1.1 Verifying the License Key Installation	6
2.2 Downloading the FastHistory.tar Program	7
Chapter 3 – Configuration	11
3.1 Configuring ROCLINK 800	12
3.1.1 History Segment Configuration	12
3.1.1 History Segment Configuration 3.1.2 History Segment Point Configuration	12 14
3.1.1 History Segment Configuration 3.1.2 History Segment Point Configuration 3.2 FastHistory Screen	12 14 15
3.1.1 History Segment Configuration 3.1.2 History Segment Point Configuration 3.2 FastHistory Screen 3.2.1 FastHistory – Information Tab	
3.1.1 History Segment Configuration 3.1.2 History Segment Point Configuration 3.2 FastHistory Screen 3.2.1 FastHistory – Information Tab 3.2.2 FastHistory – Setup Tab	
<ul> <li>3.1.1 History Segment Configuration</li></ul>	
3.1.1 History Segment Configuration 3.1.2 History Segment Point Configuration 3.2 FastHistory Screen 3.2.1 FastHistory – Information Tab 3.2.2 FastHistory – Setup Tab 3.3 Saving the Configuration Chapter 4 – Reference Material	

[This page is intentionally left blank.]

## Chapter 1 – Introduction

This chapter describes the structure of the manual and presents an overview of the Fast History Program for the ROC800-Series Remote Operations Controller.

#### 1.1 Scope and Organization

This document serves as the user manual for the Fast History Program, which is intended for use in the ROC800-Series Remote Operations Controllers. This manual describes how to download, install, and configure the Fast History Program (referred to as the "Fast History" or "the program" throughout the rest of this manual). You can access and configure this program using ROCLINK<sup>™</sup> 800 Configuration Software installed on a personal computer (PC) running Microsoft<sup>®</sup> Windows<sup>®</sup> XP (with Service Pack 3), Vista (32-bit) or Windows 7 (32-bit).

The sections in this manual are arranged to provide information in the order in which it is needed for first-time users. Once you become familiar with the procedures and the software running in the ROC, the manual may be used as a reference tool.

The manual has the following major chapters:

- Chapter 1, Introduction
- Chapter 2, Installation
- Chapter 3, Configuration
- Chapter 4, Reference Materials

This manual assumes that you are familiar with the ROC800-Series and its configuration. For more information, refer to the following manuals:

- ROC800-Series Remote Operations Controller Instruction Manual (part D301217X012).
- ROCLINK 800 Configuration Software User Manual (for ROC800-Series (part D301250X012).

#### 1.2 Product Overview

The Fast History program gives the ROC800-Series product family the capability to log user-defined parameters to a database at a much quicker rate than is normally allowed.

Standard firmware based history allows for a time period as low as 1 sample per minute. The Fast History program enables data sampling at intervals of 30 seconds, 15 seconds, 10 seconds, 5 seconds, 1 second, 500 ms, 250 ms, 200 ms, or 100 ms. The program can record data at this rate for 15 floating point values, and 8 discrete values packed into a single byte. This rate of sampling creates large amounts of data, and cannot run indefinitely. Therefore, you can enable or disable logging, as necessary.

Requiring the use of History Segment 1, the configured program (rather than the standard firmware) populates that history segment.

#### 1.3 Program Requirements

The Fast History program (QER 07Q019) version 1.03 is compatible with ROC800 Series 2 firmware version 3.61 (or higher), and version 2.41 (or higher) of ROCLINK 800 software. The software requires you to install a hardware license key.

Program specifics include:

#### Notes:

- Two versions of the program are included. Installation and operation are identical between the two programs, which use different point type locations and different display numbers. You can load the program into the slot of your choice on the ROC800.
- This document demonstrates the installation of FastHistory.64.tar. The installation process and functionality is the same for either version of the program.

File Name	Target Unit/ Version	User Defined Point (UDP)	Flash Used (in bytes)	SRAM Used (in bytes)	DRAM Used (in bytes)	ROCLINK 800 Version	Display Number
FastHistory.64.tar	Series 1: 2.16 Series 2: 3.61	64	18,346	154	69,632	2.41	64
FastHistory.65.tar	Series 1: 2.16 Series 2: 3.61	65	18,353	154	73,728	2.41	65

Note: You must connect a PC to the ROC's LOI port **before** starting the download.

For information on viewing the memory allocation of user programs, refer to *Section 9.4* of the *ROCLINK 800 Configuration Software User Manual* (*for ROC800-Series*) (part D301250X012).

#### 1.3.1 License Keys

License keys, when matched with valid license codes, grant access to applications such as the Fast History program.

The term "license key" refers to the physical piece of hardware that can contain up to seven different licenses (refer to *Figure 1*). Each ROC800-Series can have none, one, or two license keys installed. If you remove a license key after enabling an application, the firmware disables the task from running. This prevents unauthorized execution of protected applications in a ROC.



Figure 1. License Key

[This page is intentionally left blank.]

## Chapter 2 – Installation

This section provides instructions for installing the user program into the ROC800-Series. Read *Section 1.3* of the manual for program requirements.

The downloadable program name is FastHistory.64.tar or FastHistory.65.tar.

**Note:** You must connect a PC to the Local Operator Interface (LOI) port before you begin the download.

#### 2.1 Installing the License Key

If you order the Fast History program for a new ROC, your device is delivered with the license key installed. Go to *Section 2.2*.

If you order the program for an existing ROC800-Series, you must install the license key yourself.

Caution Failure to exercise proper electrostatic discharge precautions, such as wearing a grounded wrist strap may reset the processor or damage electronic components, resulting in interrupted operations.

When working on units located in a hazardous area (where explosive gases may be present), make sure the area is in a non-hazardous state before performing these procedures. Performing these procedures in a hazardous area could result in personal injury or property damage.

To install a license key:

- 1. Remove power from the ROC800-Series.
- 2. If necessary, remove the wire channel cover.
- **3.** Unscrew the screws from the Central Processing Unit (CPU) faceplate.
- 4. Remove the CPU faceplate.
- **5.** Place the license key in the appropriate terminal slot (P4 or P6) in the CPU.



Figure 2. License Key Installation

Note: When using a single license key, install it in slot P4.

**6.** Press the license key into the terminal until it is firmly seated (refer to *Figure 2*).

- **7.** Re-attach the CPU faceplate.
- 8. Re-attach the screws on the CPU faceplate.
- 9. If necessary, re-attach the wire channel cover.
- 10. Restore power to the ROC800-Series.

#### 2.1.1 Verifying the License Key Installation

After you install the license key, you can verify whether the ROC800-Series recognizes the key. From the ROCLINK 800 screen, select **Utilities** > **License Key Administrator**. The License Key Administrator screen displays:

icense Key Administrator							9	X
License Key #1								
Num Application Name	Provider Name	AppCode	Version	Quantity	#Available	Expiration	Time Created	
1 Fast History	Emerson FCD	1	1.0.0	1	0	No Expiration	05/11/2015 12:17:48	
License Key#2	•	Move	Mer	je	<u>S</u> plit	]		
Num Application Name	Provider Name	AppCode	Version	Quantity	#Available	Expiration	Time Created	

Figure 3. License Key Administrator

**Fast History** appears in the Application Name column. (For further information on the License Key Administrator screen, refer to *Section 9.24* of the *ROCLINK 800 Configuration Software User Manual (for ROC800-Series)* (part D301250X012).)

After you verify that the license key is correctly installed and recognized, proceed to *Section 2.2* to download the user program.

#### 2.2 Downloading the FastHistory.65.tar Program

This section provides instructions for installing the FastHistory.65.tar program file into the Flash memory on the ROC800.

To download the program using ROCLINK 800 software:

- 1. Connect the ROC to your computer using the LOI port.
- **2.** Start and logon to ROCLINK 800.
- **3.** Select **Utilities** > **User Program Administrator** from the ROCLINK menu bar. The User Program Administrator screen displays (see *Figure 4*):

User Program Administrator		? ×
Device User Program Environmer <u>Used</u> <u>Free</u> SRAM : 1604 203196 DRAM : 356352 17854464 FLASH : 47104 3565568	it Library Version : 29.(	)
User Programs Installed in Device 1 - No Program 2 - No Program 3 - No Program	Name : No Program	Library Version :
4 - No Program 5 - No Program 6 - No Program 7 - No Program 8 - No Program	Created : Handle : Entry Pt :	DRAM Used: 0 FLASH Used: 0
Clear Start Stop	Proc ID : Displays : Status : Empty	Restart Counter : 0 Reset Counter
Download User Program File		
		Browse
	Dow	nload & Start Download
		Dupdate Close

Figure 4. User Program Administrator

- **4.** Select any empty program number (in this case, number 1) into which to download the program.
- **5.** Click **Browse** in the Download User Program File frame. The Select User Program File screen displays (see *Figure 5*).
- **6.** Select the path and user program file to download from the CD-ROM. (Program files are typically located in the Program Files folder on the CD-ROM.) As *Figure 5* shows, the screen lists all valid user program files with the .TAR extension:

Select User Program File		X
Computer > I	Local Disk (E:) 🕨 Program Files	✓ ← Search Program Files
Organize 🔻 New folder		≣ - 🗌 🥹
Favorites E Desktop Downloads S Recent Places	Name FastHistory.64.tar FastHistory.65.tar	Date modified         Type           4/24/2015 12:49 A         TAR File           4/24/2015 12:49 A         TAR File
<ul> <li>☐ Libraries ⇒ Documents     </li> <li>✓ Music         Pictures     </li> <li>✓ Videos</li> </ul>		
Computer COS (C:) Local Disk (E:) TD-RAS (L) FRSI (\Phmnl1-FS01) (F		
File <u>n</u> ame: K	KeypadDisplay.tar	✓ User Programs (*.elf;*.elf.gz; ▼)     Qpen Cancel

Figure 5. Select User Program File

7. Click **Open** to select the program file. The User Program Administrator screen displays. As shown in *Figure 6*, note that the Download User Program File frame identifies the selected program and that the **Download & Start** button is active:

User Program Administrator		? ×
Device User Program Environmen           Used         Free           SRAM :         1604         203196           DRAM :         356352         17854464           FLASH :         47104         3565568	tLibrary Versio	on : 29.0
User Programs Installed in Device		
1 - No Program	Name : No Program	
3 - No Program	Version :	Library Version :
4 - No Program 5 - No Program	Created :	DRAM Used : 0
6 - No Program 7 - No Program	Handle :	FLASH Used : 0
8 - No Program	Entry Pt :	
	Proc ID :	Destat Country 0
Clear Start Stop	Displays :	Restart Counter:
All - Option	Status : Empty	Reset Counter
Download User Program File		
E:\Program Files\FastHistory.65.t	ar	Browse
		Download & Start Download
I		Depate Close

Figure 6. User Program Administrator

**8.** Click **Download & Start** to begin loading the selected program. The following message displays:



Figure 7. Confirm Download

**9.** Click **Yes** to begin the download. When the download completes, the following message displays:

ROCLINK	00
0	Download & Start User Program COMPLETED.
	ОК

Figure 8. ROCLINK 800 Download Confirmation

- **10.** Click **OK**. The User Program Administrator screen displays (see *Figure 9*). Note that:
  - The Device User Program Environment frame reflects the use of system memory.
  - The User Programs Installed in Device frame identifies the installed program(s).
  - The Status field indicates that the program is running.

Device User Program Environm <u>Used</u> Fre SRAM : 27558 1772 DRAM : 471040 177397 ELASH : 364032 32486	ient 12 16 10 Librer (Vorsion : 20	20
User Programs Installed in Dev	ce	
1 - FastHistory         2 - InjectionController         3 - No Program         4 - No Program         5 - No Program         6 - No Program         7 - No Program         8 - No Program         Clear       Start         Clear       Start         All - Option	Name : FastHistory Version : 1.03 Created : 11/10/2015 16:18:30 Handle : 1 Entry Pt: 0x2EE7968 Proc ID : 0x20088 Bioplays :65 Status Running	Library Version : 29.0 DRAM Used : 69632 FLASH Used : 18336 Restart Counter : 0 Reset Count
Download User Program File		
U. Users\ave.manriquez\Desk	top (nastriistory bb.tar	wnload & Start Downloa

Figure 9. User Program Administrator

**11.**Click **Close** and proceed to *Chapter 3* to configure the program.

# Chapter 3 – Configuration

After you have downloaded and started the Fast History program, you must make changes to ROCLINK 800 before you configure the program. Access all screens from the main ROCLINK 800 screen

Use the Fast History screen to view information on the proper operation of the Fast History program and to define the logging interval, status inputs, and process data that is recorded by the program.



Figure 10. Main ROCLINK 800 screen (with Configuration Tree)

#### 3.1 Configuring ROCLINK 800

Before configuring the user program, you must make changes to ROCLINK 800. In addition to the parameters normally configured in ROCLINK 800, you also need to configure or verify the History Segment Configuration and History Segment Point Configuration screens.

#### 3.1.1 Configuring History Segments

Use the History Segment Configuration screen to adjust the number of points ROCLINK 800 uses.

To access this screen:

- 1. Login to ROCLINK 800 and connect to the ROC800-Series device.
- 2. Select **Configure** > **History Segments** from the ROCLINK 800 menu bar.

History Se	egment Configu	ration											? X
Segment	t Tag	Number of Points	Minute Entries	Periodic Entries	Daily Entries	Space Allocated	Peri San Ra	odic nple ate	Cor H	ntract our	Logging	User Flow Weight	Force End of Day
General	General 00	120	60	840	35	113135	60	•	1	•	Enable 🔻	Undefined	 Now
1	Segment 01	60	60	840	35	57035	60	•	2	•	Enable 🔻	Undefined	 Now
2	Segment 02	60	60	840	35	57035	60	•	3	•	Enable 🔻	Undefined	 Now
3	Segment 03	0	60	840	35	935	60	•	0	•	Enable 🔻	Undefined	 Now
4	Segment 04	0	60	840	35	935	60	•	0	•	Enable 🔻	Undefined	 Now
5	Segment 05	0	60	840	35	935	60	•	0	•	Enable 🔻	Undefined	 Now
<u>6</u>	Segment 06	0	60	840	35	935	60	•	0	•	Enable 🔻	Undefined	 Now
Z	Segment 07	0	60	840	35	935	60	•	0	•	Enable 🔻	Undefined	 Now
8	Segment 08	0	60	840	35	935	60	•	0	•	Enable 🔻	Undefined	 Now
<u>9</u>	Segment 09	0	60	840	35	935	60	•	0	•	Enable 🔻	Undefined	 Now
10	Segment 10	0	60	840	35	935	60	•	0	•	Enable 🔻	Undefined	 Now
11	Segment 11	0	60	840	35	935	60	•	0	•	Enable 🔻	Undefined	 Now
12	Segment 12	0	60	840	35	935	60	•	0	•	Enable 💌	Undefined	 Now
A	vailable Space	236555	- Total	Space A	llocated	236555	= Av	ailat	ole S	ipace	e to Allocate 🛛	0 OK XCance	 ! Apply

Figure 11. ROCLINK 800, History Segment Configuration

- **3.** Change the Number of Points field for Segment 01 to a value of **18**.
- 4. Change the Periodic Entries field for Segments 02-12 to a value of **0**.
- 5. Change the Daily Entries field for Segments 01-12 to a value of **0**.
- 6. Change the Periodic Entries field for Segment 01 to a value of 10000.

Seament	Tag	Number of Points	Minute Entries	Periodic Entries	Daily Entries	Space Allocated	Peri San Ba	odic nple ate	Cont Hc	tract	Logging	User Flow Weight	Force End
General	General 00	46	60	840	35	43945	60	-	0	-	Enable -	Undefined	 Now
1	Segment 01	18	60	10000	0	191140	60	-	0	•	Enable 🔻	Undefined	 Now
2	- Segment 02	0	60	0	0	60	60	•	0	•	Enable 🔻	Undefined	 Now
3	Segment 03	0	60	0	0	60	60	-	0	•	Enable 🔻	Undefined	 Now
4	Segment 04	0	60	0	0	60	60	•	0	•	Enable 💌	Undefined	 Now
5	Segment 05	0	60	0	0	60	60	•	0	•	Enable 💌	Undefined	 Now
6	Segment 06	0	60	0	0	60	60	-	0	•	Enable 💌	Undefined	 Now
Z	Segment 07	0	60	0	0	60	60	•	0	•	Enable 💌	Undefined	 Now
8	Segment 08	0	60	0	0	60	60	-	0	•	Enable 💌	Undefined	 Now
9	Segment 09	0	60	0	0	60	60	-	0	•	Enable 💌	Undefined	 Now
10	Segment 10	0	60	0	0	60	60	-	0	•	Enable 🔻	Undefined	 Now
11	Segment 11	0	60	0	0	60	60	•	0	•	Enable 💌	Undefined	 Now
12	Segment 12	0	60	0	0	60	60	•	0	•	Enable 💌	Undefined	 Now
Av	ailable Space 🛛	236555	- Total	Space A	llocated	235745	= Av	ailat	ole Sp	ace	e to Allocate	810	

Figure 12. History Segment Configuration (with configured values)

- 7. Click Apply and then OK. The main ROCLINK 800 screen displays.
- **8.** Proceed to Section 3.1.2, History Segment Point Configuration.

#### 3.1.2 Configuring History Segment Points

You must also make changes to the History Segment Point Configuration screen. These changes tell the ROC what type of data the program collects.

To access this screen:

- 1. Select **Configure** > **History Points** from the ROCLINK 800 menu bar.
- **2.** Select the **Segm...01** tab on the History Segment Point Configuration screen.

Gene00 Segm01 Segm02 Segm03 Segm04 Segm05 Segm06 Segm07 Segm08 Segm09 Segm10 Segm11 Segm12											
Point	Archive Type	Archive Point	Point Tag	User Description	Current Value	Last Daily Value					
1	User Program Time	Undefined			0.0	0.0					
2	User Program Data	Undefined			0.0	0.0					
3	User Program Data	Undefined			0.0	0.0					
4	User Program Data	Undefined			0.0	0.0					
5	User Program Data	Undefined			0.0	0.0					
6	User Program Data	Undefined			0.0	0.0					
7	User Program Data	Undefined			0.0	0.0					
8	User Program Data	Undefined			0.0	0.0					
9	User Program Data	Undefined			0.0	0.0					
10	User Program Data	Undefined			0.0	0.0					
11	User Program Data	Undefined			0.0	0.0					
12	User Program Data	Undefined			0.0	0.0					
13	User Program Data	Undefined			0.0	0.0					
14	User Program Data	Undefined			0.0	0.0					

Figure 13. History Segment Point Configuration, Segm...01 tab

- **3.** Change (as show in *Figure 13*) the Archive Type field of Point 1 to a value of **User Program Time**.
- **4.** Change (as shown in *Figure 13*) the Archive Type field of points 2 18 to a value of **User Program Data**.
  - **Note:** Leave the Archive Point field for points 1-18 at the default value (either "undefined" or 0,0,0). Optionally, complete the User Description field for each point with a short description of the variable being logged.
- 5. Click Apply and then OK. The ROCLINK 800 screen appears.
- **6.** Proceed to *Section 3.2* to configure the Fast History program.

#### 3.2 FastHistory Screen

Use this screen to view information on the proper operation of the Fast History program and to define the logging interval, status inputs, and process data that the program records.

To access this screen:

- From the Directory Tree, select User Program > Program #1, FastHistory.
- 2. Double-click **Display #65**, **FastHistory**. Double-click **#1**, **Setup**. The Product screen displays, showing the Information tab:

Note	S.
Setup	x
	<ol> <li>In FIOCUNK800, configure the FIOCs "History Segments" to allow 18 points to be recorded in Segment 1. Consult this programs manual for details if needed.</li> </ol>
	Set up History Segment 1's Points as follows:
	Segment 1, History Point 1 as "User Program Imme".
	originani i, many coma catologi ta di Costi Program Odia .
	2. Using this display, perform the following:
	Enter the desired logging interval. Valid entries are 100ms, 200ms, 250ms, 500ms, 1s, 5s, 10s, 15s, and 30s.
	Configure the status points and process data that history will record.
	Status 1
	<ol> <li>Configure Status Inputs 1 through 8 to point to discrete values.</li> </ol>
	<ol><li>The program will set the corresponding bit for each status value of the Packed Byte parameter. This parameter will be stored in History.</li></ol>
	Process Data 1 through 15:
	<ol> <li>Configure Data Inputs 1 through 15 to point to process data to record.</li> </ol>
	<ol><li>The program write the values of each of these data points to history at the configured logging interval.</li></ol>
	Check the Enable Logging parameter to start logging the information to history.
	3. The program will record the time and date stamp of the data record, the resolution in milliseconds, the packed byte value and the data values in history

Figure 14. FastHistory, Information tab

**Note:** The Fast History screen has a tab format. *Sections 3.2.1* and *Section 3.2.2* discuss the requirements for each tab on the Product screen.

### 3.2.1 FastHistory – Information Tab

Use this tab (which displays when you access the Fast History screen) to view information and instructions on the proper operation of the program.

**Note:** This is a **read-only** screen and provides generalized reference information on the proper use of the Fast History program. Consult this manual for more detailed instructions.



Figure 15. FastHistory, Information tab

#### 3.2.2 FastHistory – Setup Tab

Use this tab to define the logging interval, status inputs, and process data that is recorded by the program.

To access this screen:

**1.** Select the **Setup** tab. The FastHistory screen displays:

ormation Setup					
Configuration	Process Date				_
Logging Interval 250ms	Data 1	Undefined	-	0.0	
Enable Logging	Data 2	Undefined		0.0	
	Data 3	Undefined		0.0	
Status Values	Data 4	Undefined		0.0	
Value of Packed Bytes 0	Data 5	Undefined		0.0	
Status 1 Undefined 0	Data 6	Undefined		0.0	
Status 2 Undefined 0	Data 7	Undefined		0.0	
Status 3 Undefined 0	Data 8	Undefined		0.0	
Status 4 Undefined 0	Data 9	Undefined		0.0	
Status 5 Undefined 0	Data 10	Undefined	-	0.0	
Status 6 Undefined 0	Data 11	Undefined		0.0	
Status 7 Undefined 0	Data 12	Undefined		0.0	
Status 8 Undefined 0	Data 13	Undefined		0.0	
	Data 14	Undefined		0.0	
	Data 15	Undefined		0.0	

Figure 16. FastHistory, Setup tab

2.	Review	the	values	in	the	foll	lowing	fiel	lds:
----	--------	-----	--------	----	-----	------	--------	------	------

Field	Descriptio	n										
Logging Interval	Defines the polling the history poin <b>500ms</b> , <b>10</b> value is <b>25</b>	e amount o system for nts. Valid v <b>00ms, 5s, 0ms</b> .	of time the values a values are 10s, 15s	e program and archiv e <b>100ms</b> , a <b>, and 30</b> s	im waits before iving them into <b>s, 200ms, 250ms</b> , <b>0s</b> . The default							
	Logging Interval (ms)	# of History Points	Amo	ount of His	story	_						
	100	10000	16 min	40 s								
	200	10000	33 min	20 s								
	250	10000	41 min	40 s								
	500	10000	1 hr	23 min	20 s							
	Logging Interval (s)	# of History Points		Amount o	f History							
	1	10000	2 hr	46 min	40 s							
	5	10000	13 hr	53 min	20 s							
	10	10000	1 day	3 hr	46 min	40 s						
	15	10000	1 day	17 hr	40 min							
	30	10000	3 days	11 hr	20 min							
Enable Logging	Select to h during the is <b>unselec</b>	ave the pro polling pro <b>ted</b> .	ogram wr cess to h	ite the va istory. Th	lues gath le default	ered value						
Value of Packed Bytes	This <b>read-</b> gathered d	<b>only</b> field o uring the p	displays t oolling pro	he total si ocess.	ize of the	data						
Status 1-8	Click to assign a di is recordec	display the screte input in history	e TLP scr ut. The st as a <b>1</b> or	een, whic atus of th • <b>0</b> .	ch you us e discrete	e to e input						
Data 1-15	Click to display the TLP screen, which you use to assign an analog input. The floating point value of the analog input is recorded in history (typically the live in- use EU value). If you do not use analog inputs, assign these fields only to parameters with a "Float" data type.											

- **3.** Click **Apply** and then **Close** to save any changes you have made and return to the main ROCLINK 800 screen.
- **4.** Proceed to *Section 3.3* to define how the system retrieves history values.

#### 3.3 Retrieving History Values

Use the following screens to retrieve history data from the device.

To access this screen:

- From the ROCLINK menu bar, select View > History > From Device. The Select History to View screen displays.
- **2.** Select Segment #1, Segment 01 and select **Hour/Periodic** as the History Type.

Select History to View	P X
<ul> <li>Segment #1, Segment 01</li> <li>Point #1, 1,, PGM TIME</li> <li>Point #2, 1,, PGM DATA</li> <li>Point #3, 1,, PGM DATA</li> <li>Point #4, 1,, PGM DATA</li> <li>Point #5, 1,, PGM DATA</li> <li>Point #6, 1,, PGM DATA</li> <li>Point #8, 1,, PGM DATA</li> <li>Point #10, 1,, PGM DATA</li> <li>Point #11, 1,, PGM DATA</li> <li>Point #12, 1,, PGM DATA</li> <li>Point #14, 1,, PGM DATA</li> <li>Point #15, 1,, PGM DATA</li> <li>Point #15, 1,, PGM DATA</li> <li>Point #16, 1,, PGM DATA</li> <li>Point #17, 1,, PGM DATA</li> <li>Point #18, 1,, PGM DATA</li> <li>Point #18, 1,, PGM DATA</li> </ul>	Column Headers ● Default ● User Description History Type ● Minute ● Hour/Periodic ● Day ✓ OK ★Cancel

Figure 17. Select History to View

**3.** Click OK to display the Periodic History values table:

E RC	CLINK 800 - [Periodi	c History: A1G2 - Re	emote Oprtr	os Cotriri																X
	lo Edit Viou PO	C Configuro Moto	n Utilition	Tools Wi	indow Hol	n														
		C <u>C</u> onnigure <u>M</u> ete	n <u>O</u> undes IMI∎s It∧	<u>1</u> 00is <u>W</u> i		թ թեներ	2 12													5 X
		<b>8</b> • 3∈   4, 4,   1•	1 101 <b>**</b>   IV:	· II:  P ~			: 1:													
Perio	dic History: A1G2 - Re	mote Oprtns Cntrlr 8:17. Operator: LOI																		
Opiu	iueu. 03/03/2013/23.2	1 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	Date/Time		'		'	·		'	'	·	'	·	'	'		'	·			
<u> </u>	01/01/0000 00:00:00	PGM TIME	PGM	PGM	PGM	PGM	PGM	PGM	PGM	PGM	PGM	PGM	PGM	PGM	PGM	PGM	PGM	PGM	PGM	
2	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
4	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
7	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
8	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
9	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
10	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
12	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
13	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
14	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
15	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
10	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
18	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
19	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
20	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
21	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
23	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
24	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
25	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
26	01/01/2000 00:00:00	01/01/19/0 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
28	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
29	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
30	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
31	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
32	01/01/2000 00:00:00	01/01/19/0 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
34	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
35	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
36	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
37	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
38	01/01/2000 00:00:00	01/01/19/0 00:00:00 01/01/1970 00:00:00	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	
40	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
42	01/01/2000 00:00:00	01/01/1970 00:00:00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	~
1 43	111701172000 00:00:00	117/11/1970 00:00:00	0.000	0 000	0 000	0.0000	0 000	0.000	0 000	0 0000	0.000	0 0000	0.000	Plot	n nnnn	n nnnn tNew	Save	Print Preview		. 1
														FIOT			<u>a</u> dve	Entreview		-
																		JN-LINE	10:56 PM	A //

#### Figure 18. Periodic History

**4.** Review the values in the following fields (Columns):

Column	Description
Date/Time	The Fast History program does not use this column, which retains its default values.
PGM TIME	This column represents the time stamp (day and time) that the data in the same row has been archived.
PGM	The first PGM column contains the number of micro seconds into the second that the data is logged. For logging intervals less ais value increases relevant to the records taken within the same second. This field is not used for logging intervals greater than or equal to 1 second (such as 5 seconds)
PGM	The second PGM column contains the value of the packed bits recorded at the time of the history record

Column	Description
PGM	The third and subsequent PGM columns contain the value of the floating point parameters recorded at the time of the history record.

**5.** Proceed to *Section 3.4* to save the configuration.

#### 3.4 Saving the Configuration

Whenever you modify or change the configuration, it is a good practice to save the final configuration to memory.

To save the configuration:

1. Select **ROC** > **Flags**. The Flags screen displays:

Flags	2 X				
Flags Advanced					
Restart	Restore Configuration				
Warm Start	From Factory Defaults				
<u>C</u> old Start	Clear				
Cold Start & Clear Alar <u>m</u> s	History Configuration & Data				
Cold Start & Clear Events	- Flash Memory				
Cold Start & Clear FSTs	Save Configuration				
Cold Start & Clear <u>H</u> istory Data	Clear				
Cold Start & Clear ALL	Flash Write Status :				
(D)pdate	✓ OK XCancel ! Apply				

Figure 19. Flags screen

2. Click Save Configuration. A verification message displays:



Figure 20. Perform Save screen

- **3.** Click **OK** to begin the save process. The Status field on the Flags screen displays *In Progress*. When the process ends, the Status field on the Flags screen displays *Completed*.
- **4.** Click **Update** on the Flags screen. This completes the process of saving your new configuration.
- **Note:** For archive purposes, you should also save this configuration to your PC's hard drive or a removable media (such as a flash drive) using the **File** > **Save Configuration** option on the ROCLINK 800 menu bar.

[This page is intentionally left blank.]

# Chapter 4 – Reference Materials

This section provides information on the user-defined point type the Fast History program uses:

#### Fast History

• Point Type 64/65 (Fast History)

### 4.1 Point Type 64/65: Fast History

Point type 64/65 contains the parameters defining selections for the Fast History program.

Parm #	Name	Access	Program or User Update	Data Type	Lengt	h Range	Default	Version	Description of functionality and meaning of values
0	Tag ID	R/W	User	String10	10	$0x20 \rightarrow 0x7E$ for each ASCII character	" "	1.00	Identification name.
1	Log Interval	R/W	User	U16	2	100, 200, 250, 500, 1000, 5000, 10000, 15000, 30000	250	1.00	Millisecond interval between attempts to record data. Valid values are 100, 200, 250, 500, 1000, 5000, 10000, 15000, and 30000.
2	Enable Logging	R/W	User	U8	1	0-255	0	1.00 I	If enabled, logs data at the configured interval.
									If a status is non-zero, it is considered True, Logical 1.
3	Packed Status	R/O	System	U8	1	0-255	0	1.00	Looks at the value of status 1 through status 8, and packs the values into one byte to store in history.
									If a status is non-zero, it is considered True, Logical 1. The lowest bit of this byte represents the value of status 1.
									Example: Status 1 and 3 are non-zero, the rest are zero. The bits would be set as 0000 0101. The value of this parameter would be 5.
4	Status 1 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be represented by bit 1 in the packed byte.

Point Type	64/65: Fast History								
Parm #	Name	Access	Program or User Update	Data Type	Length	Range	Default	Versior	Description of functionality and meaning of values
5	Status 1	R/O	System	U8	1	0-255	0	1.00	The value of the parameter defined by Status 1.
									If a status is non-zero, it is considered True, Logical 1.
6	Status 2 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be represented by bit 2 in the packed byte.
7	Status 2	R/O	System	U8	1	0-255	0	1.00	The value of the parameter defined by Status 2.
									If a status is non-zero, it is considered True, Logical 1.
8	Status 3 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be represented by bit 3 in the packed byte.
9	Status 3	R/O	System	U8	1	0-255	0	1.00	The value of the parameter defined by Status 3.
									If a status is non-zero, it is considered True, Logical 1.
10	Status 4 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be represented by bit 4 in the packed byte.
11	Status 4	R/O	System	U8	1	0-255	0	1.00	The value of the parameter defined by Status 4.
									If a status is non-zero, it is considered True, Logical 1.
12	Status 5 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be represented by bit 5 in the packed byte.

Point Type 64/65: Fast History

Parm #	Name	Access	Program or User Update	Data Type	Length	Range	Default	Versior	Description of functionality and meaning of values
13	Status 5	R/O	System	U8	1	0-255	0	1.00	The value of the parameter defined by Status 5.
									If a status is non-zero, it is considered True, Logical 1.
14	Status 6 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be represented by bit 6 in the packed byte.
15	Status 6	R/O	System	U8	1	0-255	0	1.00	The value of the parameter defined by Status 6.
									If a status is non-zero, it is considered True, Logical 1.
16	Status 7 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be represented by bit 7 in the packed byte.
17	Status 7	R/O	System	U8	1	0-255	0	1.00	The value of the parameter defined by Status 7. If a status is non-zero, it is
									considered True, Logical 1.
18	Status 8 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be represented by bit 8 in the packed byte.
19	Status 8	R/O	System	U8	1	0-255	0	1.00	The value of the parameter defined by Status 8.
									If a status is non-zero, it is considered True, Logical 1.
20	Data 1 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stores in history.
21	Data 1	R/O	System	Float	1	Any valid IEEE 754 float	0	1.00	The value of the data point.

Parm #	Name	Access	Program or User Update	Data Type	Len	gth Range	Default	Versio	n Description of functionality and meaning of values
22	Data 2 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stored in history.
23	Data 2	R/O	System	Float	4	Any valid IEEE 754 float	0	1.00	The value of the data point.
24	Data 3 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stored in history.
25	Data 3	R/O	System	Float	4	Any valid IEEE 754 float	0	1.00	The value of the data point.
26	Data 4 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stored in history.
27	Data 4	R/O	System	Float	4	Any valid IEEE 754 float	0	1.00	The value of the data point.
28	Data 5 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stored in history.
29	Data 5	R/O	System	Float	4	Any valid IEEE 754 float	0	1.00	The value of the data point.
30	Data 6 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stored in history.
31	Data 6	R/O	System	Float	4	Any valid IEEE 754 float	0	1.00	The value of the data point.
32	Data 7 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stored in history.
33	Data 7	R/O	System	Float	4	Any valid IEEE 754 float	0	1.00	The value of the data point.
34	Data 8 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stored in history.

Point Type 64/65: Fast History

Point Type 64/65: Fast History

Parm #	Name	Access	Program or User Update	Data Type	Len	gth Range	Default	Version	Description of functionality and meaning of values
35	Data 8	R/O	System	Float	4	Any valid IEEE 754 float	0	1.00	The value of the data point.
36	Data 9 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stored in history.
37	Data 9	R/O	System	Float	4	Any valid IEEE 754 float	0	1.00	The value of the data point.
38	Data 10 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stored in history.
39	Data 10	R/O	System	Float	4	Any valid IEEE 754 float	0	1.00	The value of the data point.
40	Data 11 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stored in history.
41	Data 11	R/O	System	Float	4	Any valid IEEE 754 float	0	1.00	The value of the data point.
42	Data 12 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stored in history.
43	Data 12	R/O	System	Float	4	Any valid IEEE 754 float	0	1.00	The value of the data point.
44	Data 13 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stored in history.
45	Data 13	R/O	System	Float	4	Any valid IEEE 754 float	0	1.00	The value of the data point.
46	Data14 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stored in history.
47	Data 14	R/O	System	Float	4	Any valid IEEE 754 float	0	1.00	The value of the data point.

Parn #	n Name	Access	Program or User Update	Data Type	Length	n Range	Default	Version	Description of functionality and meaning of values
48	Data 15 TLP	R/W	User	TLP	3	Any TLP in the ROC	0, 0, 0	1.00	Defines the parameter in the ROC database to be stored in history.
49	Data 15	R/O	System	Float	4	Any valid IEEE 754 float	0	1.00	The value of the data point.
50	Current History Index	R/O	System	U16	2	0 -> 65535	0	1.03	Determines the current working periodic index into the in-use history segment. Can be used for the retrieval of history via protocol. Increments by 1 for each history entry made, and will rollover to 0 when it reaches the maximum size of the history segment, as defined by 124,X,3 (Periodic Entries).

For customer service and technical support, visit <u>www.emersonprocess.com/remote/support</u>

#### Headquarters:

Emerson Process Management Remote Automation Solutions 6005 Rogerdale Road Houston, TX 77072 U.S.A. T +1 281 879 2699 | F +1 281 988 4445 www.EmersonProcess.com/Remote

Europe:

Emerson Process Management Remote Automation Solutions Unit 8, Waterfront Business Park Dudley Road, Brierley Hill Dudley UK DY5 1LX T +44 1384 487200 | F +44 1384 487258 www.EmersonProcess.com/Remote

North American/Latin America: Emerson Process Management Remote Automation Solutions 6005 Rogerdale Road Houston TX USA 77072 T +1 281 879 2699 | F +1 281 988 4445 www.EmersonProcess.com/Remote

Middle East/Africa: **Emerson Process Management** Remote Automation Solutions Emerson FZE P.O. Box 17033 Jebel Ali Free Zone – South 2 Dubai U.A.E. T +971 4 8118100 | F +971 4 8865465 www.EmersonProcess.com/Remote

Asia-Pacific:

Emerson Process Management Remote Automation Solutions 1 Pandan Crescent Singapore 128461 T +65 6777 8211| F +65 6777 0947 www.EmersonProcess.com/Remote © 2007-2016 Remote Automation Solutions, a business unit of Emerson Process Management. All rights reserved.

Remote Automation Solutions, a business unit of Emerson Process Management, shall not be liable for technical or editorial errors in this manual or omissions from this manual. REMOTE AUTOMATION SOLUTIONS MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS MANUAL AND, IN NO EVENT SHALL REMOTE AUTOMATION SOLUTIONS BE LIABLE FOR ANY INCIDENTAL, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PRODUCTION, LOSS OF PROFITS, LOSS OF REVENUE OR USE AND COSTS INCURRED INCLUDING WITHOUT LIMITATION FOR CAPITAL, FUEL AND POWER, AND CLAIMS OF THIRD PARTIES.

Emerson Process Management Ltd, Remote Automation Solutions (UK), is a wholly owned subsidiary of Emerson Electric Co. doing business as Remote Automation Solutions, a business unit of Emerson Process Management. FloBoss, ROCLINK, ControlWave, Helicoid, and OpenEnterprise are trademarks of Remote Automation Solutions. AMS, PlantWeb, and the PlantWeb logo are marks owned by one of the companies in the Emerson Process Management business unit of Emerson Electric Co. Emerson Process Management, Emerson and the Emerson logo are trademarks and service marks of the Emerson Electric Co. All other marks are property of their respective owners.

The contents of this publication are presented for informational purposes only. While every effort has been made to ensure informational accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. Remote Automation Solutions reserves the right to modify or improve the designs or specifications of such products at any time without notice. All sales are governed by Remote Automation Solutions' terms and conditions which are available upon request. Remote Automation Solutions does not assume responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use and maintenance of any Remote Automation Solutions product remains solely with the purchaser and end-user.

