# CommunicationManager:

# Summit8800 Enron Compatibility Test

August 7, 2013



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#### **Summit8800 Enron Compatibility Test**

#### 1 CERTIFICATION PROGRAM OVERVIEW

The Software Certification Program begins with Software Quality Assurance (SQA) and is the concern of every software engineer at Automation Solutions (AutoSol) to not only reduce cost and improve product time-to-market, but to deliver products to the customer that meet or exceed expectations. SQA activities are performed on every software project by a process of peer review, designated SQA testers, and management approval.

## 2 INTRODUCTION

Conformance to software requirements is the foundation from which our software quality is measured. Specified standards are used to define the development criteria that are used to guide how the software is engineered. Software must conform to implicit requirements such as ease of use, maintainability, reliability, and so on, as well as its explicit requirements.

## 3 TEST ENVIRONMENT

AutoSol's software test environment provides the culture, processes, and tools that help ensure efficient and effective software testing. Each AutoSol client typically possesses a unique environment. AutoSol relies upon its users, both integrators and End Users to provide details and access to these environments to ensure adequate testing and verification of their unique Test Environment(s).

### 4 TEST ACCEPTANCE CRITERIA

A test is considered passed when all test cases for reading data, writing data, and storing data (both configuration and history) are successful. This includes actions during periods of good communication and periods of bad communication.

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### **Summit8800 Enron Compatibility Test**

|                              | Summit 8800<br>Enron Modbus Compatibility Test       |         |
|------------------------------|--|---------|
|                              | Hourly Log   | Results |
| Index register               |  |         |
|                              | Zero when no records are available                   | Passed  |
|                              | Correctly updated when new records are available     | Passed  |
| Hourly records               |  |         |
|                              | Correct record returned for index (repeatable        |         |
|                              | timestamp)   | Passed  |
|                              | Time and date fields formatted correctly             | Passed  |
|                              | Data fields formatted correctly and in correct order | Passed  |
| Hourly record error handling |  |         |
|                              | Out-of-range index request                           |         |
|                              | Sends clear record when configured                   | Passed  |
|                              | Sends filled record when configured                  | Passed  |
|                              | Sends exception when configured                      | Passed  |
|                              | Unfilled record request                              |         |
|                              | Sends clear record when configured                   | Passed  |
|                              | Sends filled record when configured                  | Passed  |
|                              | Sends exception when configured                      | Passed  |
| Index register               | Daily Log  |         |
|                              | Zero when no records are available                   | Passed  |
|                              | Correctly updated when new records are available     | Passed  |
| Daily records                |  |         |
|                              | Correct record returned for index (repeatable        |         |
|                              | timestamp)   | Passed  |
|                              | Time and date fields formatted correctly             | Passed  |
|                              | Data fields formatted correctly and in correct order | Passed  |

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|                         | Summit 8800<br>Enron Modbus Compatibility Test  |        |
|-------------------------|---|--------|
| Daily record error han  |   |        |
| Bally record error half | Out-of-range index request  |        |
|                         | Sends clear record when configured  | Passed |
|                         | Sends filled record when configured   | Passed |
|                         | Sends exception when configured   | Passed |
|                         | Unfilled record request   |        |
|                         | Sends clear record when configured  | Passed |
|                         | Sends filled record when configured   | Passed |
|                         | Sends exception when configured   | Passed |
|                         | Event/Alarm Log   |        |
| Index register          | Non-zero when event records are available   | Passed |
| T                       |   |        |
| Event/Alarm records     | Record formatted correctly  | Passed |
|                         | Record acknowledgement accepted   | Passed |
|                         | Review and Approval   |        |
| •                       | es that the above named compatibility test, passed all ionality, ease of use, maintainability, and reliability. |        |
|                         |   |        |
| By:                     |   |        |
| Ken Brucker, Chief Ope  | erating Officer   |        |
| Date: &->-              | 13  |        |

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