# Calisto Manager
## End-user Release Notes

Version 1.8.0

MORGAN® SCHAFFER
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The following end-user release notes are intended to help you manage a software and firmware upgrade within your organization.

## Summary

The end-user release notes apply the following Morgan Schaffer products:

| Product name | Models |
|---|---|
| Calisto | C76, C76A, C76G, C150 |
| Calisto 2 | C85, C85A, C250 |
| Calisto 5 | C500, C501 |
| Calisto 9 | C900, C900S, C901 |

The following software and firmware are now available:

| Software / Firmware name | Versions |
|---|---|
| Calisto Manager software | 1.8.0 |
| Calisto and Calisto 2 firmware *(carried by Calisto Manager)* | Main: 3.80 |
| Calisto 5 and Calisto 9 firmware *(carried by Calisto Manager)* | Main: 2.70<br>GC: 2.70 |
| Power supply firmware *(carried by Calisto Manager)* | PSU (AC): 2.2.0 (C76 and C85)<br>PSU AC/DC: 2.6.2 (C76A, C76G, C85A, C150, C250, C500, C501, C900, C900S and C901)<br>PSU 2: 1.0.0 (All) |

They can be downloaded from our website at https://www.morganschaffer.com. Please enter your client login information and navigate from the "Technical Support" tab to the "Software, Manuals & Specifications" page.

### Highlights of this release

**All Calisto monitors:**

- A new window is now available to see DNP3 and Modbus communication statistics to troubleshoot issues when communicating with external devices.
- A new PSU 2 is supported that increases reliability, reduces start up inrush current and is much easier to replace in case of a power supply failure of an old monitor.

**Calisto 5 and Calisto 9:**

- Supports continuous-cleaning gas plumbing configuration

**Calisto and Calisto 2:**

- A new Main I/O board is supported that provides higher voltage isolation on RS-485 port, 4-20 mA analog inputs and outputs.

## Technical support

If you have any questions regarding this release, please contact your Morgan Schaffer Authorized Representative or Morgan Schaffer technical support:

Web: https://www.morganschaffer.com
E-mail: support@morganschaffer.com
Telephone:  +1.514.739.1967
Toll-Free (USA and Canada): +1.855.861.1967

## Software compatibility

The following operating systems are supported by Calisto Manager:

- Microsoft Windows XP® SP3
- Microsoft Windows Vista®
- Microsoft Windows 7®
- Microsoft Windows 8®
- Microsoft Windows 10®

## Instructions

### Software upgrade

Recommendations:

1. Before upgrading Calisto Manager, review all changes in these notes to ensure compatibility with your needs.
2. Upgrade all Calisto Manager installations within your organization to the new version.

Warning: The database used by Calisto Manager may be updated in a manner that cannot be reverted to the previous format.

To install Calisto Manager, double-click on the Calisto Manager installation file and follow the on-screen instructions. At the "Choosing Components" step of the installation, be sure to check the "USB Drivers" box. If a notification window appears, choose the "Continue Anyway" option.

### Firmware upgrade

Recommendations:

1. Before upgrading the Calisto firmware, review all changes in these notes to ensure compatibility with your needs.
2. Upgrade all Calisto units in your organization with new firmware. This is accomplished by connecting to each one with the new version of Calisto Manager and following the upgrade instructions.

Warning: Firmware upgrade is irreversible.

To upgrade the Calisto firmware:

- Start the new Calisto Manager version.
- In the Calisto Manager main window, double-click the Calisto to upgrade.
- Calisto Manager will ask to do the firmware upgrade.
- After the upgrade, Calisto Manager will restart the Calisto.

## Related documents

| All Calisto monitors | Revision | Updated? |
|---|---|---|
| Calisto Manager User Guide | 21 | Yes |
| IEC 61850 Configuration Tool User Guide | 04 | Yes |
| IEC 61850 Communication Kit Installation & Configuration Manual | 08 | Yes |

| Calisto and Calisto 2 | Revision | Updated? |
|---|---|---|
| Calisto-Calisto 2 DNP3 device profile | 5.1 | Yes |
| Calisto-Calisto 2 Modbus device profile | 1.10 | Yes |
| Calisto-Calisto 2 IEC 61850 device profile | 2.0 | Yes |
| Calisto-Calisto 2 IEC 61850 configuration | 2.0 | Yes |
| Calisto-Calisto 2 Error codes and recommended actions | 01 | No |

| Calisto 5 and Calisto 9 | Revision | Updated? |
|---|---|---|
| Calisto 5-Calisto 9 DNP3 device profile | 6 | No |
| Calisto 5-Calisto 9 Modbus device profile | 1.11 | No |
| Calisto 5-Calisto 9 IEC 61850 device profile | 2.0 | Yes |
| Calisto 5-Calisto 9 IEC 61850 configuration | 2.0 | Yes |
| Calisto 5-Calisto 9 Error codes and recommended actions | 03 | Yes |

## Changes

### Calisto Manager Software

| Calisto Manager | | | Version: 1.8.0 |
|---|---|---|---|
| Type | Models | Introduced version | Description |
| Minor | C500 C900 C900S C501 C901 | 1.7.2 | Carrier gas **Low Pressure Error** minimum setting. Changed Carrier gas **Low Pressure Error** (Enable Below) value to accept a minimum value at 70 psi. It was previously limited to 200 psi. If a value below 200 psi was required, the workaround was to use the web server to change the setting. |
| Enhancement | All | N/A | Transformer information added to email. Added transformer information to email sent for Calisto events. The timestamp is now in local time. |
| New feature | C500 C900 C900S C501 C901 | N/A | New Calisto 5 and Calisto 9 error codes: <br>• Bypass Flow <br>• Detector Current Low <br>Please see **Calisto 5-Calisto 9 Error codes and recommended actions** document for more details. |
| New feature | All | N/A | Add a new window to show DNP3 and Modbus communication statistics. This new window is a great tool to help customers troubleshooting communication issues that might occur when communicating with external devices. This is only available in Advanced mode in the Calisto / Advanced menu. |
| New feature | All | N/A | Support of a new Calisto PSU. The PSU 2 is a new power supply design for the Calisto product family that increases reliability and reduces required inrush current at start up. In case an existing Calisto power supply would fail in the field, it could be replaced by a PSU 2 in a much easier manner. |
| New feature | All | N/A | Exposed Reset window in Advanced mode. In the Calisto / Advanced menu, it is now possible to perform a software reset of the monitor. It has to be understood that a customer must have a good reason to perform such action since it could prevent the monitor to perform measurements for several minutes. |

Hash codes to verify the integrity of the file:

| | |
|---|---|
| MD5 | 2CE0025B682C994E66D424F28F4D77DC |
| SHA-1 | 15C01A395F74A4DF261F417684EFA91184BC1B19 |
| SHA-256 | 7CE5308F1B1C09ECEC89E1EFBD9F91027DE1EC0CFC2D222EF5E27E4C1F81EEEA |

### Calisto and Calisto 2 firmware

| Main | | | Version 3.80 |
|---|---|---|---|
| Type | Models | Introduced version | Description |
| Major | All | Initial release | PSU stuck in bootloader. A rare condition could occur where the PSU stays in bootloader after a firmware upgrade. This release fixes this issue. |
| Minor | All | N/A | Update device profile. For Modbus, DNP3 and IEC 61850 the device profile have been updated with the latest error names specified in the **Calisto-Calisto 2 Error codes and recommended actions document**. |
| Enhancement | All | N/A | Support new IEC 61850 module. The new module provides faster IEC61850 configuration transfer and faster data |

| | | | availability. |
|---|---|---|---|
| Enhancement | All | N/A | Support new Main I/O.<br><br>A new Main I/O board is supported by this release. This new Main I/O will provide better voltage isolation for RS-485, 4-20 mA inputs and outputs. |

## Calisto 5 and Calisto 9 firmware

| Main | | | Version 2.70 |
|---|---|---|---|
| Type | Models | Introduced version | Description |
| Major | All | Initial release | PSU stuck in bootloader.<br><br>A rare condition could occur where the PSU stays in bootloader after a firmware upgrade.<br><br>This release fixes this issue. |
| Major | All | 2.30 | GC I/O synchronization error.<br><br>A rare GC I/O synchronization error could occur for firmware version 2.30 and later releases.<br><br>This release fixes this issue. |
| Major | All | 2.30 | GC I/O communication errors.<br><br>A rare GC I/O communication errors error could occur for firmware version 2.30 and later releases.<br><br>This release fixes this issue. |
| New feature | All | N/A | New information available on web server page:<br><br>• Gas consumption rates for both cylinders.<br>• Modbus and DNP3 last error. |

| GC | | | Version 2.70 |
|---|---|---|---|
| Type | Models | Introduced version | Description |
| Critical | C501<br>C901 | N/A | Supports continuous-cleaning gas plumbing configuration.<br><br>This release supports an improved gas flow configuration that continuously cleans the gas chromatograph while still achieving 4 years of carrier gas life time and while keeping the gas detector always on. |
| Minor | C500<br>C900 | Initial release | Gas cylinder change procedure not always completed.<br><br>When maintenance procedure was initiated more than one time to change the carrier gas cylinder or to change both gas cylinders, the Calisto did not complete the procedure.<br><br>This release fixes this issue. |

## Power supply firmware

| PSU 2 | | | Version 1.0.0 |
|---|---|---|---|
| Type | Models | Introduced version | Description |
| Enhancement | All | N/A | PSU 2 initial firmware release.<br><br>This firmware is required if a PSU 2 has been installed in a monitor. The addition of the new PSU card and the firmware is improving reliability of the monitor power supply. |

# Types of changes

| Type | Description |
| --- | --- |
| Critical | Change that fixes a problem that affects a basic functionality and does not have a workaround. It requires an upgrade. |
| Major | Change that fixes a problem that affects a basic functionality and has a workaround. It requires an upgrade if the workaround is not applicable. |
| Minor | Change that fixes a problem that affects a non-basic functionality and may have a workaround. It does not necessarily require an upgrade. |
| Enhancement | Change that improves an existing feature that brings new value. |
| Change | Change that does not fix any problem or bring any new value. |
| New feature | Change that adds new capabilities. |
| Security | Change that fixes a problem related to security. It usually does not have an impact on normal operation. The customer must decide if it requires an upgrade. |