

# The Bridge to Open Access Control

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“Screwdriverless” Migration from  
Legacy and Obsolete Systems to Flexible  
Solutions for Open Access Control





## “Screwdriverless” Migration from Legacy and Obsolete Systems to Flexible Solutions for Open Access Control

### Overview

New technologies and acquisitions within the access control industry often lead to the forced obsolescence and/or upgrade of proprietary offerings. With thousands of systems in place, vendors seek options to retain customers using these legacy and obsolete systems. There are two approaches currently employed by vendors working with customers who have legacy systems:

#### Rip and replace obsolete and legacy system with another proprietary access control solution

- Many vendors offer alternative solutions that are generally heavily discounted and aimed at minimizing the investment needed for enterprise-wide replacement of legacy access control systems. These vendors seek to solve the outdated feature set or obsolescence of a system by replacing it with a newer proprietary offering of their own.
- In essence, this approach provides a path for customers to simply move from one inflexible proprietary system to another. While this may provide a short-term solution to the immediate problem -- and sometimes at an artificially lower cost -- it merely perpetuates the issue of being locked into a single-vendor proprietary solution.

#### Replace legacy or obsolete system hardware with new hardware built on open architecture

- Using a direct board replacement approach eliminates the need to re-wire the legacy peripheral devices, significantly improving the economics for a system migration to a new platform. It also enables customers to move beyond the limitations of proprietary hardware into a current, dynamic and open access control infrastructure.
- This approach also makes it possible to take advantage of advanced features and functionality based on an architecture designed for interoperability and future enhancements.

At the same time, some customers prefer not to make any change at all; these customers only consider replacing their access control solution when the current system fails. While this may save money in the short term, this approach leaves their system at risk for failure and potentially incapable of upgrades to add new features, install bug fixes and make cyber security improvements.



## From Proprietary to Open Access Control

The Authentic Mercury open architecture model makes it possible for end-user organizations to choose from industry-leading access control software providers, both at time of product selection or in the future, should they need to change software providers at any given time. Mercury's approach provides a streamlined path to move organizations from proprietary and/or obsolete systems to an open, flexible and interoperable platform for systematic access control.

Mercury's vision for building a completely open access control hardware platform with a highly articulated API is to also ensure organizations can protect their largest investment in an access control system. By providing each software partner with access to the same firmware and API, end customers that standardize on Authentic Mercury have the freedom to choose the software platform that best fits their needs.

Mercury offers two bridge options as part of its historic line of controllers designed for interoperability with legacy third party access control systems. The bridge products are shaped from the existing Authentic Mercury controller platform and are designed to fit the specific physical parameters of Software House's iSTAR Pro Series and Casi Micro5 enclosures used in Picture Perfect™, Secure Perfect™ and Facility Commander™ access systems.

Unlike competitor products, Mercury's solution offers end-user customers a direct path to feature-rich access control hardware by providing a direct board "swap" using a "screwdriverless" solution. This enables a time efficient, cost effective migration by re-using most of the existing legacy system infrastructure.

### Additional Benefits of Mercury's Bridge products:

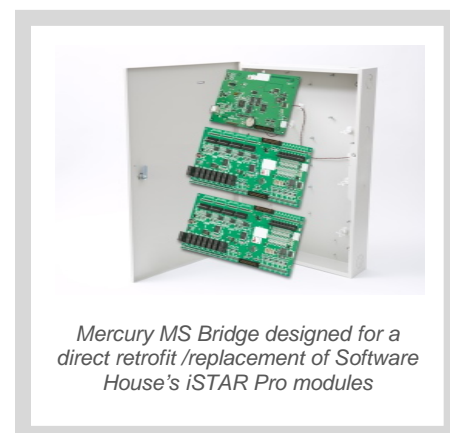
- Provides a bridge from legacy systems to new and future access control systems.
- Plug & play format: simply disconnect the Software House or Casi board and connect the appropriate Mercury Bridge for an easy "screwdriverless" change over to Authentic Mercury open platform hardware.
- Enables customers to select from a range of [leading software providers](#).
- Provides a path to the future through system expansion with the Authentic Mercury platform.

### Migrating from the Software House iSTAR Pro Series

The MS Bridge series for Software House upgrades include multi-interface panels to replace the following Software House iSTAR Pro

- iSTAR Pro GCM
- iSTAR Pro ACM
- iSTAR Pro R8 module
- iSTAR Pro I8 module

The modules replicate the iSTAR Pro access control hardware form fast "screwdriverless" change over and easy migration of Software client infrastructure to any Authentic Mercury software partner solutions.



device  
modules:

factor for  
House

## Mercury Replacement Part Numbers for Software House iSTAR Pro Products

Software House iSTAR Pro Model	Mercury MS Model	Description
iSTAR Pro GCM	MS-ICS	<p>Can interface with up to 2 ACM Modules</p> <ul style="list-style-type: none"> <li>• 64 reader capacity</li> <li>• Supports 600,000 cardholders</li> <li>• Expansion through Mercury MR series modules</li> <li>• Universal I/O device characterization</li> <li>• AES 128/256 Bit Encryption and TLS</li> <li>• Large encoded card number support</li> <li>• Multi-brand wireless lock support</li> </ul>
iSTAR Pro ACM	MS-ACM	<p>ACM is an auxiliary board that communicates with the MS ICS and also provides input and output connections to readers and other security components.</p> <ul style="list-style-type: none"> <li>• 8 reader capacity supporting multiple open reader technologies</li> <li>• Universal I/O device characterization</li> <li>• AES 128 bit data encryption</li> </ul>
iSTAR Pro R8	MS-R8S	<p>Provides cost-effective expansion of input and output capacity to MS ICS module.</p> <ul style="list-style-type: none"> <li>• 8 programmable outputs</li> <li>• Plug for plug compatibility to iSTAR Pro R8</li> <li>• AES 128 bit data encryption</li> <li>• Universal I/O device characterization</li> </ul>
iSTAR Pro I8	MS-I8S	<p>Provides cost-effective expansion of input and output capacity to MS ICS module</p> <ul style="list-style-type: none"> <li>• 8 programmable inputs</li> <li>• Plug for plug compatibility to iSTAR Pro I8</li> <li>• AES 128 bit data encryption</li> <li>• Universal I/O device characterization</li> </ul>

### Migrating from Obsolete Casi Micro5 Systems

Mercury's solution opens any CASI Micro5 system to provide end-user customers the choice of using a range of the industry's leading access control software products. The M5 Bridge was built from the existing



*Mercury M5 Bridge designed for a direct retrofit /replacement of the CASI Micro5*

Authentic Mercury controller platform and redesigned to fit the specific physical parameters of Casi Micro5 enclosures used in Picture Perfect™, Secure Perfect™ and Facility Commander™ access systems.

The M5 replicates the Casi Micro5 access control hardware form factor for fast change over and easy migration of Casi client infrastructure to any Authentic Mercury software partners.

Mercury's design allows a communication board (M5-COM) to be used in place of an intelligent controller board. The Mercury implementation enables up to three M5 Series enclosures to cascade off the first (head-of-the-line) enclosure, with an intelligent controller managing up to 64 readers and corresponding points.

### Mercury Replacement Part Numbers for Casi Products

CASI Micro5 Model	Mercury M5 Model	Description
PX CPU PXN CPU PXNplus CPU	M5-IC	<ul style="list-style-type: none"> <li>• Access Control CPU Board</li> <li>• 2 RS-485 Ports (1 internal, 1 external)</li> <li>• 1 10/100 MB Ethernet Port</li> </ul>
2SRP	M5-2SRP	<ul style="list-style-type: none"> <li>• 2 Supervised Reader Interface Ports</li> <li>• Wiegand/Magstripe/F2F/Supervised F2F</li> <li>• 4 Configurable Inputs</li> <li>• 6 Programmable Outputs</li> <li>• 2 Auxiliary Outputs</li> </ul>
2RP	M5-2RP	<ul style="list-style-type: none"> <li>• 2 Reader Interface Ports</li> <li>• Wiegand/Magstripe/F2F/Supervised F2F</li> <li>• 4 Configurable Inputs</li> <li>• 6 Programmable Outputs</li> <li>• 2 Auxiliary Outputs</li> </ul>
8RP	M5-8RP	<ul style="list-style-type: none"> <li>• 8 Reader Interface Ports</li> <li>• F2F/Supervised F2F</li> <li>• Monitors Door I/O through F2F Interface</li> </ul>
20 DI	M5-20IN	<ul style="list-style-type: none"> <li>• 20 Programmable Inputs</li> </ul>
16 DO	M5-16DO	<ul style="list-style-type: none"> <li>• 16 Programmable Digital Outputs</li> <li>• Digital Output Board</li> </ul>
16 DOR	M5-16DOR	<ul style="list-style-type: none"> <li>• 16 Programmable Form C Relays</li> </ul>
N/A	M5-COM	<ul style="list-style-type: none"> <li>• Promotes the Chaining of Multiple M5 Enclosures</li> <li>• RS-485 splitter providing RS-485 link to Micro backplane for downstream Micro enclosures</li> </ul>
N/A	M5-MUX8	<ul style="list-style-type: none"> <li>• RS-485 8 Channel Multiplexers</li> <li>• Enables Replacement of F2F Devices in the Field</li> <li>• Replaces F2F Communications with Mercury Protocol</li> <li>• Supports 8 MR Series Mercury Modules</li> </ul>
M2000	M5-2K	<ul style="list-style-type: none"> <li>• Intelligent Controller</li> <li>• Includes M5-IC and M5-2K Base Board</li> <li>• 4 F2F Based Reader Interface Ports</li> <li>• 10 Configurable Inputs</li> <li>• 8 Form C Relays</li> <li>• Expansion Through Mercury MR Series Modules</li> </ul>

## Cost Savings Using Authentic Mercury Hardware

The Authentic Mercury MS Bridge and M5 Bridge are designed to capture and eliminate as much of the system installation as possible to shrink the economic impact of system changeover. Mercury has accomplished this by using the existing site enclosures, power supplies, card base and, where supported, reader wiring connected to the currently installed Software House and Casi controllers.

Additionally, there are two distinct cost advantages to using the M5 Bridge over the obsolete Casi offerings:

- The Mercury Bridge controllers do not require power management boards in every in every M series enclosures (saving several hundred dollars per enclosure).
- The Mercury Bridge products do not require an intelligent controller board in every M series enclosure.

The result is a lower total cost of ownership (TCO) as compared to the original Casi M5 design or competitive designs.

## About Mercury Security

As the global leader in the supply of OEM access control hardware, Mercury Security has the largest installed base with three million panels sold and the greatest accumulated run time of any access hardware provider in the world. With over 23 years in the market, Mercury provides open platform hardware that addresses the full spectrum of access control requirements. This ensures OEM partners, installers and end customers spanning virtually all vertical markets can select from a variety of Authentic Mercury solutions to meet their needs. [www.mercury-security.com](http://www.mercury-security.com).

For true access control...*Make Sure it's Merc*