Release Notes - ABC4022-A

Table of Contents

ABC4022-A - 2.00.01 . . . 1
ABC4022-A - 1.01.01 . . . 3
ABC4022-A - 1.00.02 . . . 4

ABC4022-A - 2.00.01

Added security features

Category	Description	Comment
Bug fix	Could not access gateway behind NAT (firewall).	
Bug fix	Reading ethStatus/ipSettings from wrong networks	Removed polling of non ethernet based networks.
Bug fix	Import of legacy configuration for Modbus TCP client fails when using write single coil	Fixed problem with import of legacy config from Modbus TCP Client. Write single coil now get the size of 1 bit. Write multiple coils now get the right bit size (used to be 0).
Bug fix	Incorrect response for some IPconfig commands.	Fixed an issue that could cause the device to fail to start after a soft reset. A soft reset can occur when applying a new configuration to the device or when the device is configured to automatically restart on a fatal error, and such error occurs.
New Feature	Added Real Time Clock and super capacitor.	The real time clock will keep the time and date during reboot up to a couple of days (roughly over a weekend).
New Feature	Added support for HTTPS for webinterface.	The user can enable HTTPS for web interface. HTTPS disabled by default.
New Feature	Added account management.	Add support for predefined user accounts with predefined sets of permissions.
New Feature	Support for security enhanced hardware added.	This is a major update including new security functionality. This update is required to support security enhancements made on the hardware level. The updated hardware is incompatible with previous firmware versions.
Security	A malicious web request could cause a fatal error.	Fixed an issue handling invalid web requests.
Security	Fixed a crash when trying to transmitting certain Ethernet frames.	Certain Ethernet frames was handled incorrectly when transmitted, leading to a crash (fatal error).
Security	ASECB-67: Fixed a Denial of Service vulnerability in the web server.	A maliciously crafted web server request could cause the web server to stop responding to requests.
Security	Sets SHICP (IPconfig) in read-only mode by default.	In order to prevent unauthorized changes to the IP-configuration of the configuration port, SHICP which is the protocol used by the Windows based IPconfig tool is set in read-only mode by default.
Security	ASECB-69: A malicious web request could cause a fatal error.	Fixed an issue handling invalid web requests.

Security	ASECB-67: Fixed a Denial of Service vulnerability in the web server.	A maliciously crafted web server request could cause the web server to stop responding to requests.

ABC4022-A - 1.01.01

Fixed that ethernet ports sometimes fail to start

Category	Description	Comment
Bug fix	Cosmetic scaling issue in I/O configuration view	Corrected problem where the toggle button was partially hidden in the I/O-configuration view when the resolution is lowerd.
Bug fix	The device's IP address didn't always respect ACD	Device failed to give up its IP address, according to ACD, if a conflict was detected during the announcing phase. This was only a problem if DHCP was enabled.
Bug fix	Out of memory problem for large configuration	Increase available memory for tcp message buffering
Bug fix	Multiple ARP request for the same destination	ARP table has been increased to prevent retransmission of ARP request to already known destinations
Bug fix	The HDL does not respect the MDIO blanking requirements for Texas DP83826.	Corrected issue sporadically causing network interfaces (RJ45) fail to start when the gateway was powered up.
Security	Improved web server performance under high load.	Fixed issue where high traffic to webserver could lock up all communication to the device for several minutes.

ABC4022-A - 1.00.02

Initial release of PROFINET - PROFINET Coupler

Category	Description	Comment
Bug fix	Incorrect configuration of LWIP IP fragmentation	Fixed problem with IP fragmentation of packets larger than 1280 bytes. Now up to 2560 byte-packets can be handled.
Bug fix	Increased stability under extreme interrupt load.	Increased stability
Bug fix	Reception of invalid formatted LLDP frames could lead to a crash.	Increased stability
Bug fix	ACD state could be stuck in "Conflict" even after IP address is recovered.	Increased stability
Bug fix	Incorrect bit mask definitions for HMS Switch Px_Cfg registers	Updated bit masks for the switch Px_CFG registers according to version 9.00.01 of the HMS Switch HDL component.
Bug fix	Don’t mix code and data.	Improved product stability, avoid Fatal at PROFINET SNMP.
Bug fix	Increment serial number with new fragments in request/response	For a fragmented DCE RPC request/response, the serial number should be incremented for every new fragment transmitted. This fix may improve interoperability with certain PROFINET controllers.
Bug fix	Old address is defended after DHCP has been enabled	After DHCP was enabled the device would still defend its old address until an address was assigned by a DHCP server.
Minor bug	Error message after FW change	Force user to open web in new tab after successful firmware update to avoid error message.
Minor bug	Bug when swapping words	In some cases (masters) swapping was not executed correctly when swapping words
Minor bug	In some situations the configuration port is set when it is not necessary	Corrected so that the handling of setting the configuration port settings is handled more gracefully.Bumped version of the template so that default values for the configuration port is assigned.
Minor bug	Unclear message when configuration port is set on Apply	Clarification of message when configuration port is set on Apply
New Feature	Added X2 and X3 port designations in user interface to clarify ports and associated network.	Makes it easier identify which side is referred to in the GUI, especially if for a product with the same protocol on both sides.
New Feature	Add support for controlling the auto negotiation abilities of the switch ports.	The autonegotiation abilities can now be changed for products with gbit support.
New Feature	Add callback function for project specific MAC initialization.	Added callback for project specific MAC initialization.
New Feature	Add clear and status byte support	Support clear data when process data is invalid
New Feature	Put CPU to sleep in NULL task	Lowers the amount of power consumed by the product
New Feature	Add MDIO blanking for 5ms after PHY reset	Improved firmware compatibility with future hardware revisions