

Release Notes - ABC3000-A

Table of Contents

ABC3000-A - 2.00.01.....	1
ABC3000-A - 1.07.02.....	3
ABC3000-A - 1.06.02.....	4
ABC3000-A - 1.05.01.....	5
ABC3000-A - 1.04.01.....	6
ABC3000-A - 1.03.02.....	7
ABC3000-A - 1.02.01.....	8
ABC3000-A - 1.01.01.....	9
ABC3000-A - 1.00.03.....	9
ABC3000-A - 1.00.02.....	10
ABC3000-A - 1.00.01.....	11

ABC3000-A - 2.00.01

Added security features

Category	Description	Comment
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	Improved TCP SYN grammar.	This increases stability from test tools such as Achilles testing different unusual/incorrectly designed TCP packets.
Bug fix	Processing of incoming IP packets could be delayed for up to 1ms after an overload event.	
Bug fix	Improved ARP probing for ACD.	The random time to wait before sending the first ARP probe is now at a minimum 50 ms to avoid probes being dropped due to both link partners not being ready.
Bug fix	Rare bug caused stored hostname and domainname to be corrupted.	
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	Fixed bug that could cause an IP address to be used directly, bypassing ACD.	
Bug fix	ACD semi active probes were not sent correctly if semi active phase was entered in-between the two initial ARP announcements.	
Bug fix	Instability of the ETNM network on high network load.	Fixed an issue where the tcp/ip-task starvate the ETNM-task on high tcp load.
Bug fix	Out of memory problem for large configuration.	Increase available memory for tcp message buffering.
Bug fix	Error when parsing network configuration.	When parsing the network configuration, the option "Offline Option Clear" where not parsed correctly if option "Status Byte" where not included in the configuration.

Bug fix	Improved accuracy of process data monitor interval.	The interval for the process data monitor is specified as 500ms but the actual interval was closer to 501ms. This has been resolved and should result in more accurate monitoring.
Bug fix	Incorrect response for some IPconfig commands.	When receiving an IPconfig configuration which contained an invalid IP-address and subnet mask combination the device would incorrectly reject the configuration with a "success" response.
Bug fix	NTP client is initialized before the network adapter of the config port is initialized.	The NTP client initialization sequence has been corrected to ensure the network adapter of the config port is fully initialized before the NTP client is started.
Bug fix	Improved reception reliability for serial telegrams.	When running at a high baudrate with a low inter-telegram timeout the device could fail to receive the last character of a telegram with length $2+32*N$.
Bug fix	Improved reception accuracy for serial telegrams.	Fixed a rare issue that could cause the data of a received telegram to get corrupted. The corruption occurred before any checksum verification, and the corrupt data would have been discarded if checksums were used.
Bug fix	Fixed bug when serial monitor was too slow when there was fast traffic on the serial network.	
Bug fix	Fixed bug where transactions may be displayed in wrong order in the serial monitor.	
Bug fix	Cannot access gateway behind NAT (firewall).	Updated the API to always send the complete origin.
Bug fix	Add port postfix to the networks (X2/X3).	
Feature	Support for security enhanced hardware added (only supported on HW with password on housing).	This update is required to support security enhancements made on the hardware level. The updated hardware is incompatible with previous firmware versions.
New Feature	Clear and status byte support.	Support clear data when process data is invalid.
New Feature	Added account management.	Regardless if HTTPS is enabled or not, the product supports different user accounts with configurable rights.
New Feature	Added support for HTTPS for webinterface.	The user can enable HTTPS for web interface. HTTPS disabled by default.
New Feature	Added Real Time Clock and capacitor.	The real time clock will keep the time and date during reboot up to a couple of days (roughly over a weekend).
Security	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. This has been fixed.
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.
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.
Security	A malicious web request could cause a fatal error.	Fixed an issue handling invalid web 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.

ABC3000-A - 1.07.02

Added possiblity to change order of nodes

Category	Description	Comment
Bug fix	Byte swapping sometimes not applied	Fixed bug where byte swap was not always effective.
Maintenance	Update to Angular 15 (WEB)	Keeps web package up to date to latest standard
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	Configuration port behavior issue when not using the configuration port	When accessing the web using an industrial network port, the behaviour sometimes was not as expected.
New feature	Add support for change on state legacy behavior	Adds an option to get the same change on state update behavior as in ABC Classic (do not re-send if first value is 0).
New feature	Add possibility to configure restart-on-fatal	Adds a setting to make the communicator to automaticallt restart if entering fatal state.
New Feature	Added support for changing order of serial nodes	Allows the user configure in which order the communicator shall communicate with the different nodes.
New Feature	Added the possibility to set configuration port IP from the GUI	Added the possibility to set configuration port IP from the GUI

ABC3000-A - 1.06.02

Category	Description	Comment
Bug fix	Don't mix code and data.	Improved product stability, avoid Fatal at PROFINET SNMP.
Bug fix	Byte swapping sometimes not applied	Corrected problem where the byte swapping was sometimes not applied.
Minor bug	Add possibility to configure restart-on-fatal	Allows the user to enable a feature that reboots the communicator if entering fatal mode. Fatal is not supposed to occur, but if the operation of the communicator is located in an inconvenient location it can be motivated.
New Feature	Route signal to support override of DE for RS485	Enable pre post extension of serial signal
New Feature	Added register to override the RS485 DE signal from software.	Enable pre post extension of serial signal
New Feature	Add possibility to configure pre/post transmission signal	Added possibility to configure pre/post transmission signals

ABC3000-A - 1.05.01

Added support for PROFIBUS Legacy mode

Category	Description	Comment
Bug fix	Unable to access "Transaction templates"	Fixed access issue to "Transaction templates"
Bug fix	Remove the unused "Representation" for the Checksum	Removed the unused "Representation" field of the Checksum frame object.
Bug fix	Incorrect size reported in frame editor for the Checksum object	Corrected size which is reported in frame editor for the Checksum object
New Feature	Upgrade to Angular 15	Upgraded to Angular 15
New Feature	PROFIBUS legacy mode	Added support for ABC classic GSD files as 1:1 replacement

ABC3000-A - 1.04.01

Added support for: Large serial frame, large variable data object, start / end characters, bugfixes

Category	Description	Comment
Bug fix	Acyclic HDL buffers are used after they are acknowledged.	The acyclic HDL buffers are now released first after callback functions to the application have been performed. Before the fix the buffers were acknowledged before the call which could result in collisions.
Bug fix	0.0.0.0 is now only accepted when dhcp is enabled.	It was possible to configure 0.0.0.0 as static IP address. If this was configured the module will be unreachable and the module needed a factory default reset.
Bug fix	Incorrect LED timing.	Improved accuracy of LED blink frequencies.
Bug fix	Fixed issue where too short modbus messages would get processed using data from previous received modbus message.	Improved serial stability
Bug fix	Fixed Modbus to return exceptions in the order they where detected.	Improved error management
Bug fix	Module could enter fatal during re-configuring.	Fixed issue that may cause the module to enter fatal during re-configuring.
Bug fix	Serial tx stopped in certain situations.	Fixed problem causing serial tx to stop in certain situations.
Bug fix	Old address is defended after DHCP has been enabled.	After DHCP was enabled the device will still defend its old address until an address was assigned by a DHCP server.
Bug fix	All communication could stop with error service RR.	Fixed an issue that could cause software resources to get lost during high CPU load and cause the PROFIBUS devices to respond with "No resources" (RR) to some network requests.
Bug fix	Incorrect configuration of IP fragmentation.	Fixed problem with IP fragmentation of packets larger than 1280 bytes. Now up to 2560 byte-packets can be handled.
Bug fix	Unmapped trigger bytes caused "Something went wrong".	Ack/Nack/Trigger transaction can not be set to unmapped.
Improvement	Add support for checksum destination representation.	The serial network checksum objects' destination (i.e the serial telegram) may be configured with a representation (Binary/ASCII) independently from the transaction it belongs to.
Improvement	Increase maximum telegram length.	Increase maximum serial telegram length to 1500 bytes.
Improvement	Support larger variable data objects.	Support larger variable data objects when byte counter isn't used.
Improvement	Increase explicit message max length.	Increased maximum length of explicit serial messages to 1500 bytes.
Improvement	Max size of general map area is 1024 bytes.	Max size of general map area is set to 1500 bytes.
New feature	Added support for user comment.	The user can add text in a text field in the top right corner.
New Feature	Frame Start / End Characters.	Added support for filtering serial telegrams using start and end character to the serial protocol configuration.

ABC3000-A - 1.03.02

Support hardware with either Broadcom and Texas PHY

Category	Description	Comment
Bug fix	Possible NULL pointer access in timer handling	Increased stability under extreme interrupt load
Bug fix	ACD state could be stuck in conflict even after IP is recovered	Fixed bug that could keep the Ethernet connection in conflicted state after Automatic Conflict Detection (checking if IP-address is already taken) was resolved
Bug fix	Navigation bar and mobile mode	Navigation bar in web-gui is now automatically hidden on navigation in mobile mode
Improvement	Let CPU sleep during NULL tasks	Reduces the power consumption of the product

ABC3000-A - 1.02.01

Category	Description	Comment
Bug fix	Full-duplex RS232 communication was not working in some HDL-releases	Full-duplex for RS232 is now working in all HDL-releases
Bug fix	RS485 driver remains active up to 1 character after end of frame	RS485 driver remains active up to 1 character after end of frame, causing collision if a modbus slave device responds quicker than the specified 3.5 characters delay required by the modbus specification
Bug fix	Hostname change require powercycle on cfg port with SHICP	The Hostname settings were not applied correctly when modified using HMS Ipconfig
Bug fix	DNS1 and DNS2 address was always 0.0.0.0 after power cycle	
Bug fix	Disabled timeout = 0 was not allowed during import	Allows the user to import a configuration with timeout = 0 without issues
New feature	Disabled timeout = 0 (checkbox in gui)	Allows the user to disable timeout using a checkbox, leading to set the node always online
New feature	Process data monitor	Allows the user to monitor the traffic between the serial and slave network in both directions including byte swap / endian conversion

ABC3000-A - 1.01.01

Support hardware without unused security chip

ABC3000-A - 1.00.03

Category	Description	Comment
Bug fix	Incorrect maximum size for PROFIBUS	Corrected size for PROFIBUS to 244 bytes

ABC3000-A - 1.00.02

Category	Description	Comment
Bug fix	Incorrect gateway configuration version handling fixed	

ABC3000-A - 1.00.01

Modbus RTU Master - PROFIBUS - Full Anybus Communicator replacement

Category	Description	Comment
Bug fix	Security LED did not operate correctly after startup	Fixed an issue causing the security LED to indicate the wrong state
Bug fix	0.0.0.0 is now only accepted when dhcp is enabled.	It was possible to configure 0.0.0.0 as static IP address. If this was configured the module will be unreachable and the module needed a factory default reset.
Bug fix	Old address is defended after DHCP has been enabled.	After DHCP was enabled the device will still defend its old address until an address was assigned by a DHCP server.
Bug fix	Serial data monitor now works on Firefox	This enables serial log functionality with the Firefox web browser.
Bug fix	Fixed error when duplicating transactions that cannot be fully mapped	
Bug fix	The nodes in the "Nodes & commands" list and in the home page status overview are sorted by their addresses	
Bug fix	The serial log rows are colored to indicate direction	
Bug fix	Various web bug fixes	Various bug fixes in the user interface
Bug fix	Turnaround delay could not be set to 0	Turnaround delay could not be set to 0 (disabled), it is now possible
Improvement	Support hardware without unused security chip	
Improvement	Improve firmware update timeout error	Improved the error message when updating firmware
Improvement	Show the size to/from the serial network for each node	Allows the user to see the configured size on each node on the Nodes and transaction page with the total number of bytes to and from the serial network
New feature	Custom request and response transaction support	Allows the user to create custom request and response transactions
New feature	Standard Modbus RTU, RS232/RS485 support	Allows the user to use the gateway as a Modbus RTU Client over RS232 and RS485
New feature	Configurable byte swap / endian conversion	Allows the user to use different byte orders on serial network and the slave network
New feature	Changed minimum update time for serial transactions to 3 ms	Allows the user to set minimum update time for serial transactions to 3 ms instead of 10ms
New feature	Serial data monitor	Allows the user to monitor the serial traffic on RS232/RS485
New feature	Custom produce and consume transaction support	Allows the user to create custom produce and consume transactions
New feature	General data area	Allows the user to store data in a general data area without mapping to slave network for, ex. Trigger configurations etc.
New feature	Unlocked article ABC3090 support added	Allows the user to use SER-Ethernet/IP, SER-PROFINET, SER-Modbus TCP Firmware i ABC3090
New feature	Add support for 7 data bits	Allows the user to use 7 data bits serial transmission
New feature	Always online with only produce transactions	A node is always in state online if the node only has one or more produce transactions

New feature	Broadcast node	Allows the user to configure node 0 as a broadcast node
New feature	Data exchange control	Allows the user to enable/disable serial nodes using a register from the slave network
New feature	Acknowledge and negative acknowledge	Allows the user to map a positive feedback acknowledge to a value and a separate negative acknowledge feedback to a value
New feature	Update mode "Trigger"	Allows the user to use data as trigger to execute transactions
New feature	Frame objects available in the I/O Map	The user can see different frame objects in the I/O Map
New feature	Update mode "Cyclic"	Allows the user to set up a transaction to be executed cyclically
New feature	Added ADD and XOR checksums	Allows the user to use ADD and XOR checksums and one's and two's complement on all checksums types
New feature	Inter-telegram and inter-character delay shall be possible to set as advanced options	Allows the user to configure delay between both characters and telegrams in serial traffic
New feature	Live list functionality added to serial interface	Allows the user to read a register on the slave interface with individual serial node status
New feature	Update mode "Single shot"	Allows the user to set up a transaction to be executed once after gateway start
New feature	Brand label	Enables brand label setups with customized identities and look and feel for customers on customer specific order codes
New feature	Import / Export node template	Allows the user to save a node template to a file and read / add a node from a file
New feature	Import / Export transaction template	Allows the user to save a transaction template to a file and read / add a transaction from a file
New feature	Import a Anybus Communicator Classic configuration	Allows the user to import the serial configuration from an Anybus Communicator Classic configuration file
New feature	Import of Anybus Communicator Classic RS422 configurations	Import of Anybus Communicator Classic RS422 configurations will be allowed but converted to RS485
New feature	No cable connected indication	Indicate No link on home view when link is lost
New feature	Offline option on serial transaction	Allows the user to set offline options on a transaction, continue or pause
New feature	Offline options (clear/freeze)	Allows the user to set offline options (clear/freeze) to the transactions