ABC-02-USB
Quick Installation Guide

Automatic Backup Configurator

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MOXA®

Overview

The ABC-02-USB Automatic Backup Configurator is a device that can save and load configuration files, backup event logs, and load firmware of Moxa's managed switch via the USB (universal serial bus) interface. The ABC-02-USB is able to be accessed directly like a standard USB flash drive from a computer.

The ABC-02-USB makes it easier to manage the backup of system parameters or perform configuration during the replacement of a switch. With the ABC-02-USB, users can quickly re-install a substitute switch (of the same model) without the need of a laptop computer. The ABC-02 can be used to recover the entire system configuration, including the IP address, if a switch failure occurs.

Switches can load firmware from the ABC-02-USB and backup event logs to the ABC-02-USB. It is also an easy and fast diagnostics tool for automation engineers to retrieve configuration files and event logs in the field immediately, without the need for laptop computers.

Package Checklist

The ABC-02-USB is shipped with the following items. If any of these items is missing or damaged, please contact your customer service representative for assistance.

- 1 x ABC-02-USB
- Quick installation guide (printed)
- Warranty card

Features

- Widely used USB 2.0 interface
- Click the switch rest button to back up the configuration file and event log to ABC-02
- Automatic loading of system configuration after system reboot
- Manual upgrade firmware from ABC-02 and backup event logs to ABC-02
- Manual and saving system configuration through web console
- Extend switch event log storage capability
- Portable low-power design that requires no power supply
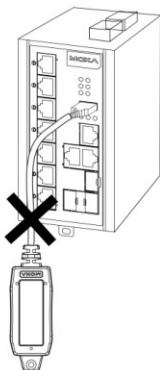- CE, FCC approval

Hardware Description
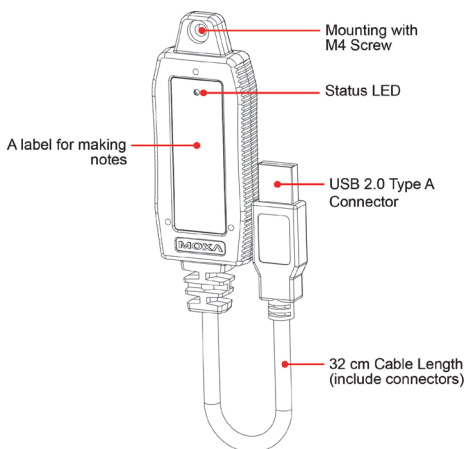
Product Installation

The ABC-02-USB is designed for use with an USB 2.0 port. Plug the ABC-02 into the USB port of your Moxa managed switch. Securing the ABC-02 on the wall with an M4 screw is suggested.
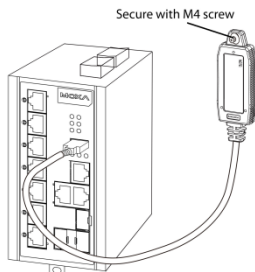
Avoid hanging the ABC-02 configurator from the switch without securing it onto the wall.

Please refer to the Product Operation section for instructions on how to save and load the configuration, firmware, and event logs.

Product Operation

Configuration Backup and Restore

- Backup switch configuration on the ABC-02

  Use the switch web console to save the configuration file to the ABC-02. This function is found under "System/System Files/ Configuration Backup and Restore ". Then select "Auto Backup Configurator (ABC-02)" in the web console. Click "Backup" to save the configuration file to the ABC-02. The file will be saved in the ":\Moxa" folder of the ABC-02. The file name is "Sys.ini".

- Restore the configuration file from the ABC-02 to the switch

  A. Manually operate in web console

     Use the switch web console to load configuration files from the ABC-02 to the switch. This function is found under "System/System Files/ Configuration Backup and Restore". Then select "Auto Backup Configurator (ABC-02)" in the web console. Click "Browse" to select the file you need. Then click "Restore" to start loading into your switch.

  B. Auto-load the configuration file from the ABC-02 to the system when the switch boots up

     Power off your switch first, and then plug in the ABC-02. Then power on your switch, the system will detect the configuration file on the ABC-02 automatically. The switch will recognize the file name with following sequence priority:

     1. "MAC address last 6 digits.ini*"
     2. "Sys.ini". If no matching configuration file is found, the fault LED light will turn on. The switch will boot up normally.

NOTE Please save your configuration files in the ":\Moxa" folder of the ABC-02. Auto-load will detect the configuration file using this path only.

Firmware Upgrade

Upgrade the firmware from the ABC-02 to the switch. You can download the firmware file from http://www.Moxa.com/support/.

Save the firmware file in the ":\Moxa" folder of the ABC-02.

Plug in the ABC-02 into your switch. Use the switch web console to load the switch firmware file from the ABC-02. This function is found under "System/System Files/ Firmware Upgrade ". Then select "Auto Backup Configurator (ABC-02)" in the web console. Click "Browse" to select the file you need. Then click "Upgrade" to start loading the file into your switch.

Log File Backup

Backup the switch log file to the ABC-02

Use the switch web console to save the configuration file to the ABC-02. This function is found under "System/System Files/ Log File Backup ". Then select "Auto Backup Configurator (ABC-02)" in the web console. Click "Backup" to save the configuration file to the ABC-02. The log file will be saved in the ":\Moxa" folder of the ABC-02. The file will be named "Sys.log".

One-click backup

The ABC-02 can backup configuration and log files from the switch. When the ABC-02 is plugged into the switch, "STATE" LEDs on the switch will start to blink slowly, and the reset function will be disabled automatically. Press the "reset" button once and the switch will start backing up configuration files and system logs to the ABC-02.
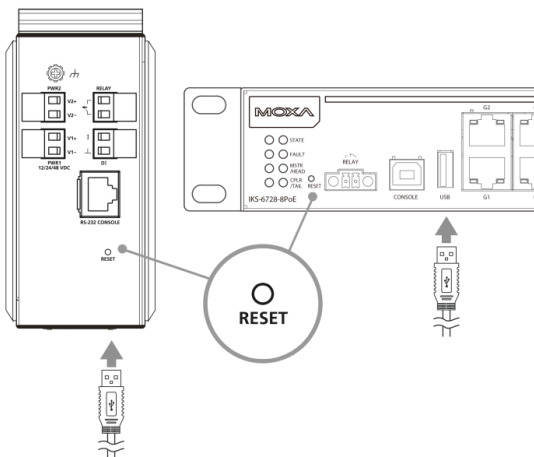
The "RESET" button is located on the front panel of rackmount type switches and on the top panel of DIN-rail type switches.

Auto backup to the ABC-02 when configurations change

The ABC-02 is capable of backing up switch configuration files automatically. This function is found under "System/System Files/ Configuration Backup and Restore". While the ABC-02 is plugged into the switch, enable the "Auto backup to ABC-02 when configuration change" option. Then click "Apply". Once this configuration is modified, the switch will back up the current configuration under the "/His_ini" folder in the ABC-02. The file name will be the system date/time (MMDDHHmm.ini).

Auto backup of the earliest 100 log entries to prevent overwriting

This function is designed to maintain a long-term record the switch log files. Moxa Ethernet switches are capable of saving 1000 entries of event logs. When the 1000-entry storage limit is reached, the switch will delete the oldest saved event log. The ABC-02 can help to backup these event logs. When switch log entries reach 1000, the ABC-02 will back up the earliest 100 entries of the switch.

The function is found under "System/System Files/ Log File Backup". Enable the "Auto backup the earliest 100 log entries to prevent overwriting". Then click "Apply". After that, when the ABC-02 is plugged into the switch, the event logs will always be saved to the ABC-02 automatically.

NOTE For further details on the ABC-02 operation through the switch web console, please refer to the switch user manual.

⚠️ **WARNING**

DO NOT remove the ABC-02 when the STATE LED is blinking or when the web console is showing WORKING status.

NOTE The status of the ABC-02 may be checked on the switch web console or by observing the switch front panel LEDs.

Operation	Switch LED status
The switch detects ABC-02-USB plugged in	STATE blinking slowly (1 time/ 2 seconds),
Import/Export in progress*	FAULT, MASTER, COUPLER LEDs Blink sequentially and circularly
Import/Export successful	FAULT, MASTER, COUPLER LEDs light off
Save/Load failed	FAULT LED light on until ABC-02 is removed or system reboot

Operation	ABC-02 LED status
Power on	ABC-02 STATE LED green light on
Reading /Writing	ABC-02 STATE LED blinking

*Does not include "Auto backup to the ABC-02 when configuration change" and "Auto backup the earliest 100 log entries to prevent overwriting

Specifications

Operating Temperature	0 to 60°C (32 to 140°F)
Storage Temperature	-40 to 85°C (-40 to 185°F)
Connectors	RS-232 RJ45 port
Power Requirement	3 to 5 VDC, power input via RS-232 RTS
Configuration	via Moxa managed switch's web console
Casing	PVC molding, IP40
Weight	50 g
Installation	M4 screw (> 4 mm)
Dimension (W × D × H)	32.5 × 97 × 12 mm
Cable Length	35 cm, including connectors
Operating Temperature	0 to 60°C (32 to 140°F)
Storage Temperature	-20 to 70°C (-4 to 158°F)
Ambient Relative Humidity	5 % to 95 % (non-condensing)
EMI	FCC Part 15, CISPR (EN55032) Class A
EMS	EN61000-4-2 (ESD), level 3
	EN61000-4-3 (RS), level 3
	EN61000-4-4 (EFT), level 3
	EN61000-4-5 (Surge), level 3
	EN61000-4-6 (CS), level 3
Warranty	5 years