

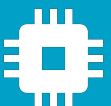


Subsystems for the
UAS intergration into
the airspace

Updater Software

Data sheet & User manual

```
ThinkPad-r480:~$ upd_app --help
UPDATER version: 10060000 (Aug 1 2023)
Usage: upd_app PORT [options]
  -readver      Reads bootloader and module versions, leaving it in lock state
  -config      Puts device in CONFIG mode
  -ub          Puts device in BOOT mode
  -update PATH  Flashes bootloader using .aff file, leaving it in lock state
  -lock 0|1    Only sets bootloader lock state
Additional options:
  -nf          Don't update components if version code in AFF match with current
  -v          Verbose output
Alternative usage: upd_app -affver PATH Reads from .aff file modules versions
Available ports: 33
/dev/ttyACM0 (Id: USB VID=303a:1001 SNR=84:F7:03:28:E9:EB, desc: Espressif US
B JTAG/serial debug unit 84:F7:03:28:E9:EB)
/dev/ttyS0 (Id: n/a, desc: ttyS0)
/dev/ttyS1 (Id: n/a, desc: ttyS1)
/dev/ttyS10 (Id: n/a, desc: ttyS10)
/dev/ttyS11 (Id: n/a, desc: ttyS11)
/dev/ttyS12 (Id: n/a, desc: ttyS12)
/dev/ttyS13 (Id: n/a, desc: ttyS13)
/dev/ttyS14 (Id: n/a, desc: ttyS14)
/dev/ttyS15 (Id: n/a, desc: ttyS15)
/dev/ttyS16 (Id: n/a, desc: ttyS16)
```



Introduction

AEROBITS Updater application is used to quickly update firmware. It is simple terminal application without additional GUI. The application can be easily integrated with own UTM system. The application also allows to update the firmware of all devices manufactured by AEROBITS.

Features

- Easy integration with own applications
- Compatibility with Windows, Linux and Linux ARM based
- Product firmware upgrade
- Firmware version checks

For more information please contact: support@aerobits.pl.

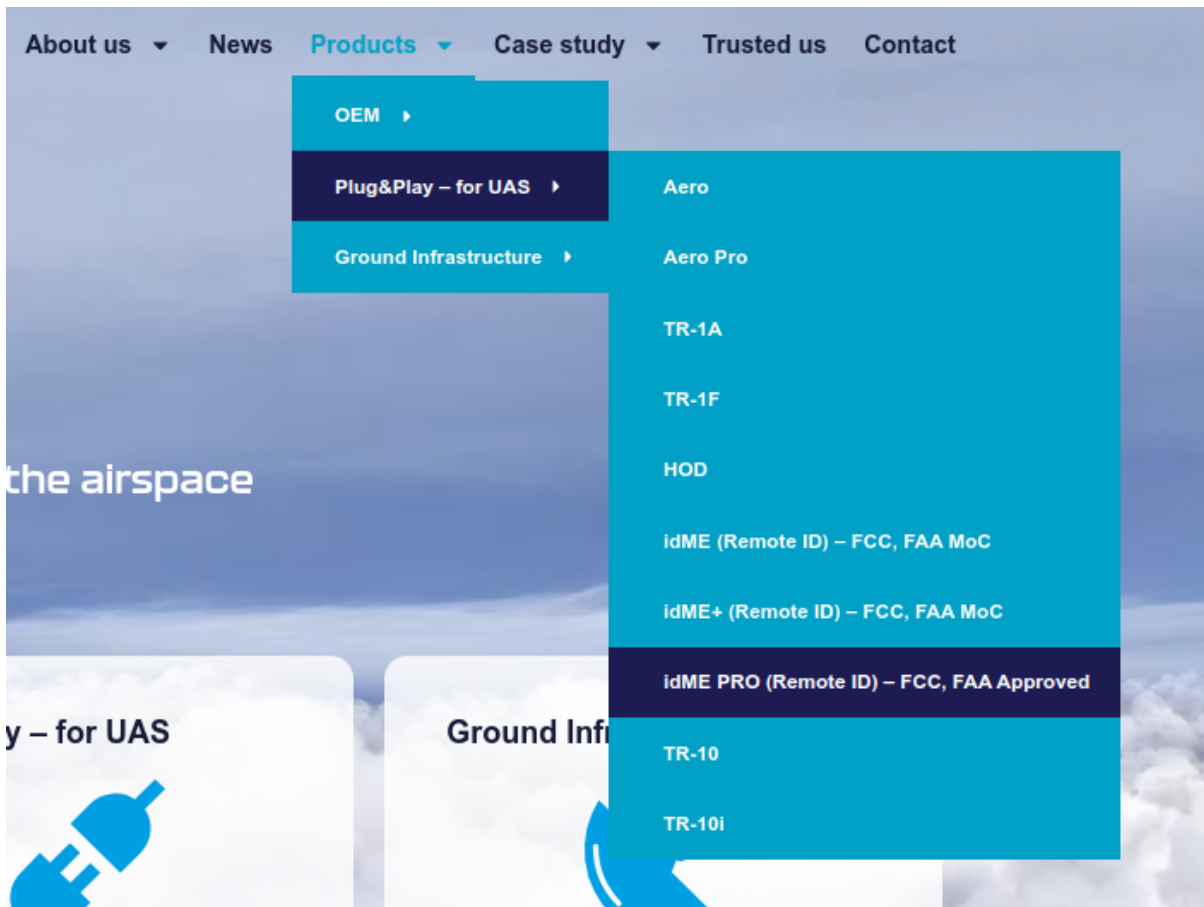
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1 Installation

1.1 Installation

1. Go to [Aerobits website](#) search your product on list.



2. At the bottom of the page, look for Updater tab and click, search Updater app for your system and download it.

Downloads:

▶ Firmware

▶ Model 3D

▶ Technical documentation

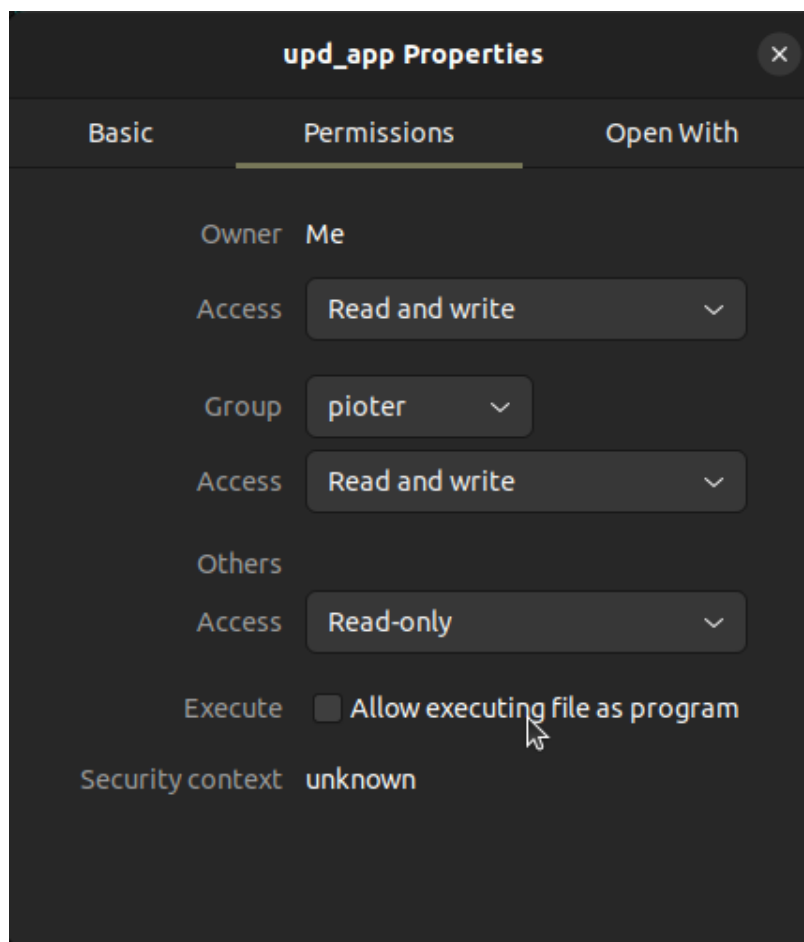
▶ Micro ADS-B

▲ Updater

Windows

Name
UpdaterApp_v1.6.6_win.zip
Download Copy Link
UpdaterApp_v1.6.4_win.zip
Download Copy Link

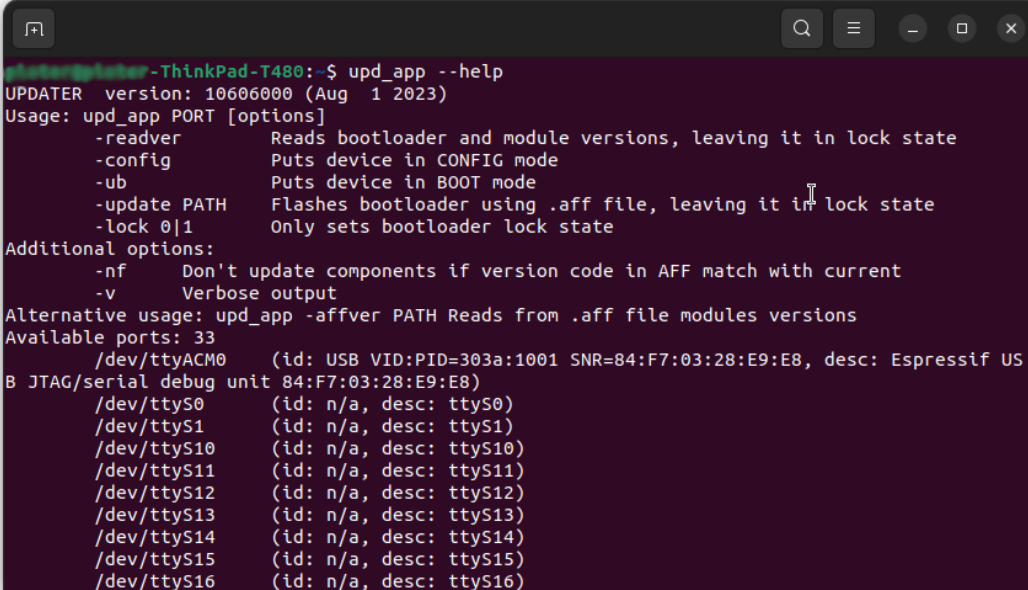
3. After download allow executing file as program in your system. For example on Linux just right click on app, go to permission tab and allow execute.



2 Quick start

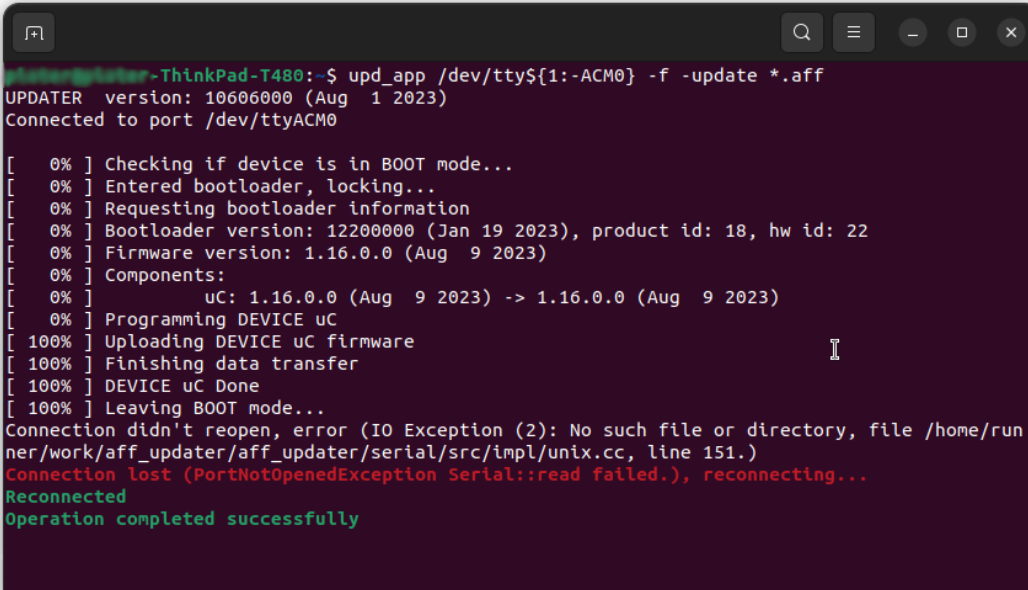
2.1 Basic functionality

- Launch application in CMD with `--help` argument. Updater app will show all necessary options.



```
root@ThinkPad-T480:~# upd_app --help
UPDATER version: 10606000 (Aug 1 2023)
Usage: upd_app PORT [options]
  -readver      Reads bootloader and module versions, leaving it in lock state
  -config       Puts device in CONFIG mode
  -ub           Puts device in BOOT mode
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  -nf          Don't update components if version code in AFF match with current
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B JTAG/serial debug unit 84:F7:03:28:E9:E8)
/dev/ttyS0 (id: n/a, desc: ttyS0)
/dev/ttyS1 (id: n/a, desc: ttyS1)
/dev/ttyS10 (id: n/a, desc: ttyS10)
/dev/ttyS11 (id: n/a, desc: ttyS11)
/dev/ttyS12 (id: n/a, desc: ttyS12)
/dev/ttyS13 (id: n/a, desc: ttyS13)
/dev/ttyS14 (id: n/a, desc: ttyS14)
/dev/ttyS15 (id: n/a, desc: ttyS15)
/dev/ttyS16 (id: n/a, desc: ttyS16)
```

- You can see device under port `/dev/ttyACM0` if you want update device just type command like below.



```
root@ThinkPad-T480:~# upd_app /dev/tty${1:-ACM0} -f -update *.aff
UPDATER version: 10606000 (Aug 1 2023)
Connected to port /dev/ttyACM0

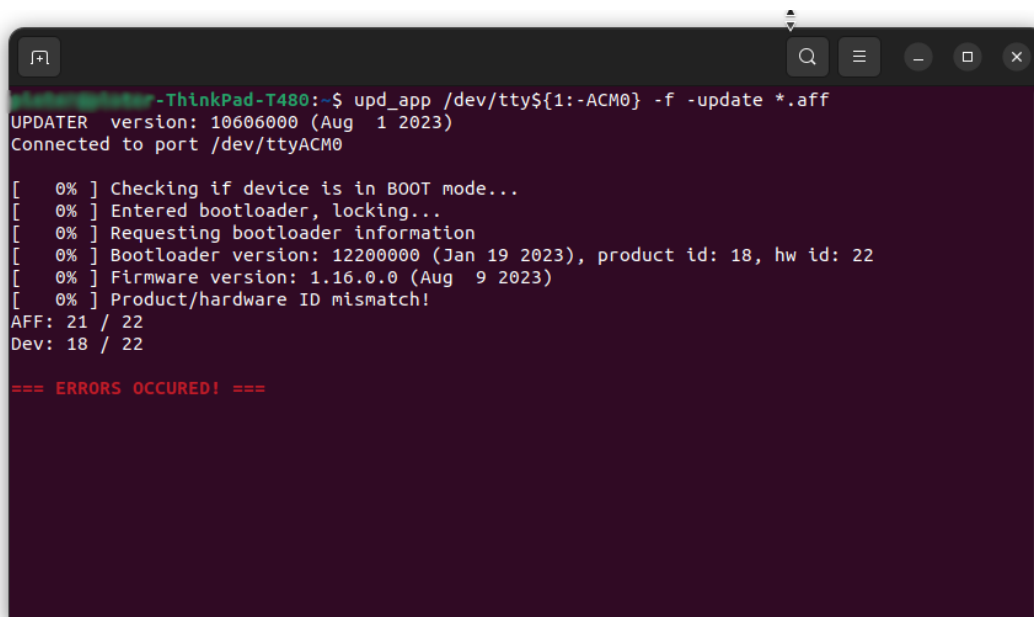
[ 0% ] Checking if device is in BOOT mode...
[ 0% ] Entered bootloader, locking...
[ 0% ] Requesting bootloader information
[ 0% ] Bootloader version: 12200000 (Jan 19 2023), product id: 18, hw id: 22
[ 0% ] Firmware version: 1.16.0.0 (Aug 9 2023)
[ 0% ] Components:
[ 0% ]         uc: 1.16.0.0 (Aug 9 2023) -> 1.16.0.0 (Aug 9 2023)
[ 0% ] Programming DEVICE uc
[ 100% ] Uploading DEVICE uc firmware
[ 100% ] Finishing data transfer
[ 100% ] DEVICE uc Done
[ 100% ] Leaving BOOT mode...
Connection didn't reopen, error (IO Exception (2): No such file or directory, file /home/run
ner/work/aff_updater/aff_updater/serial/src/impl/unix.cc, line 151.)
Connection lost (PortNotOpenedException Serial::read failed.), reconnecting...
Reconnected
Operation completed successfully
```

- After update Updater print information about operation status.

3 General information

3.1 Problems

3.1.1 Update error



```
-ThinkPad-T480:~$ upd_app /dev/tty${1:-ACM0} -f -update *.aff
UPDATER version: 10606000 (Aug 1 2023)
Connected to port /dev/ttyACM0

[ 0% ] Checking if device is in BOOT mode...
[ 0% ] Entered bootloader, locking...
[ 0% ] Requesting bootloader information
[ 0% ] Bootloader version: 12200000 (Jan 19 2023), product id: 18, hw id: 22
[ 0% ] Firmware version: 1.16.0.0 (Aug 9 2023)
[ 0% ] Product/hardware ID mismatch!
AFF: 21 / 22
Dev: 18 / 22

=== ERRORS OCCURED! ===
```

- Make sure you choose right firmware.
- Check port and spelling.

Please read carefully

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