

**+ CORPORATE
HEADQUARTERS**

707 Dayton Road
PO Box 1040
Ottawa, IL 61350
USA

p: (800) 346-3119
f: (815) 433-5109

Airborne Enterprise Class Dual-band Embedded Wireless Device Servers, Ethernet Adapters and AirborneAP™ devices.

DP551 Series

Firmware Release Notes

**+ EUROPEAN
HEADQUARTERS**

Westlink Commercial Park
Unit 10
Oranmore, Co. Galway
Ireland

p: + 353 91 792444
f: + 353 91 792445

**+ CELLULAR
PRODUCTS GROUP**

Sokolská 71
562 04 Ústí nad Orlicí III.
Czech Republic

p: +420 465 521 020
f: +420 464 647 299

Firmware 5.05 release notes

Module Numbers: 9768, 9373 and WLNN-AN-CE551

Resolved Issues:

Includes all changes from 5.02 release.

5.x releases are larger than previous 4.x images. Due to the increased size there are sometimes failures in the firmware update. The amount of memory being reserved for the firmware update file has been increased, so that future updates will be successful. Also, if attempting to update from an older firmware to the larger 5.05 and issues occur a 2 step firmware update can be done. Use DP55xFirmware405_RED_FWUPD_A.img that has the increased memory reserve first; then while running DP55xFirmware405_RED_FWUPD_A.img update to the larger 5.05 image.

Since we updated wpa_supplicant for the “KRACK Attack” fix there has been an issue with the speedlink feature. When speedlink is enabled and the airborne doesn't connect to a network (such as out of signal range long enough to disconnect without reconnecting) the Airborne device then needs manual intervention such as radio-on command to be able to reconnect to a network. In this firmware version we have made speedlink disabled in the device regardless of how it is set in the configuration, so that the Airborne will always reconnect to a network automatically.

In AP mode the wifi network started by Airborne would be unsecure for ~5s until the security was applied to the network. Now the network is down until the security profile is ready. Another issue was resolved to prevent the following scenario: if a radio-on command was sent with the wireless network already running it would cause an error and the wifi network would have no security (open AP) until Airborne was restarted.

The radio-off command previously did nothing. It now stops the wireless communications.

In the sysctl.conf.default we now set vm.overcommit_memory=2. This setting will have linux always check if there is enough space before allowing memory to be allocated. We saw if linux's oom killer activated it would sometimes cause all Airborne interfaces to go down and the reset pin was required to recover the device. Note sysctl.conf is not restored to default on firmware update, so a reset with this firmware version to rebuild it is required for the setting to be enabled.

**+ CORPORATE
HEADQUARTERS**

707 Dayton Road
PO Box 1040
Ottawa, IL 61350
USA

p: (800) 346-3119
f: (815) 433-5109

In client bridge mode when mac-clone is enabled the Airborne device would not be able to connect to an EAP network. The encrypted key was being calculated with the non-cloned address and being rejected by the AP.

In certain configurations AP mode was sending packets to wireless clients twice. One packet would be unmodified and one packet would have the Airborne's MAC address in it causing some clients to detect duplicate IP addresses and no longer function.

**+ EUROPEAN
HEADQUARTERS**

Westlink Commercial Park
Unit 10
Oranmore, Co. Galway
Ireland

p: + 353 91 792444
f: + 353 91 792445

Fixed an issue when the Airborne was configured to have less than all 3 serial ports active the serial ports that should be enabled were not.

**+ CELLULAR
PRODUCTS GROUP**

Sokolská 71
562 04 Ústí nad Orlicí III.
Czech Republic

p: +420 465 521 020
f: +420 464 647 299