

## Release Notes

<b>Topic:</b>	<b>Firmware 2.0.0 for ODIN-W2</b>
	UBX-16008005
<b>Author:</b>	Pber
<b>Date:</b>	31-May-2016

We reserve all rights in this document and in the information contained therein. Reproduction, use or disclosure to third parties without express permission is strictly prohibited.

© 2016, u-blox ag.

## 1 General Information

### 1.1 Released firmware image

File: ODIN-W26X\_FW2.0.0.14.bin

### 1.2 Updated documentation

Document	Audience	Content
ODIN-W2-ATCommands_Manual_(UBX-14044127)	Public	Specification of the supported AT commands in ODIN-W2
ODIN-W2_GettingStarted_(UBX-15017452)	Public	Getting started guide

### 1.3 Released tools

#### 1.3.1 s-center v2.0.0

s-center supports the AT commands needed to operate and configure the ODIN-W2. The s-center also supports firmware update of previous versions of the ODIN-W2 modules.

## 2 New features

### 2.1 Wi-Fi Access Point

Access Point allows up to 10 connected Wi-Fi Stations to communicate among themselves, or with the services on the module. RMII is also supported and allows the module to operate without any host to bridge the data between the RMII (Ethernet) interface and the Wi-Fi network in access point mode.

### 2.2 PPP

PPP allows a host running an IP stack to communicate with the Wi-Fi network and get internet access through a gateway connected to the network. It also allows for incoming Bluetooth (SPP and SPS) connections.

### 2.3 Low Power Modes

Low power modes have decreased power consumption from ~90 mA to 30 mA. It is also possible to disable Wi-Fi to consume less power at start-up for Bluetooth only applications.

## 3 Issues

### 3.1 Solved issues in this release

Area	Description
Application	Latency for TCP connections was too high, configuration possibility added.
Application	LPO input not correctly configured, may cause issues with power save when using an external LPO.
Application	Static IPv6 address will change if IPv4 address is reconfigured.
Application	UDP peer connected event for EDM is generated before OK command is returned.
Application	AT command for storing L2-routing configuration in startup database is missing.
Application	ATI9 UniqueIdentifier tag incorrect
Application	Layer-2 configuration (+UNL2RCFG) is not working (will generate an ERROR). Layer-2 routing may still be activated with AT+UL2RC=3, but will be deactivated on reset of the module.
Application	Default Remote peer not functional in Extended Data Mode.
Application	DHCP relay issues.
Wi-Fi	Low throughput on the Access Point (AP).
Wi-Fi	Some devices are unable to reconnect to Wi-Fi AP after link loss.
Wi-Fi	Wi-Fi AP sensitive to disturbance from other Wi-Fi networks using the same channels. This creates some problems with establishing connections (mostly observed with iOS devices).
Wi-Fi	Module resets if Wi-Fi scan (+UWSCAN) is issued while connected to the Wi-Fi AP.
Wi-Fi	IPv6 does not work with all the Access Points.
Wi-Fi	TCP transmission takes long time to recover when going in and out of range of the AP.
Bluetooth	Non-connectable mode (+UBTCM) does not work.
Bluetooth	Enabled SPS server at power up resets module.
Bluetooth	If remote device disconnects while sending data, module could stop responding.
Bluetooth	Module reset on SPP disconnect during data transmission

### 3.2 Known issues

Area	Description
Application	Ethernet interface cannot be activated after deactivation (module hangs).
Application	Module restarts when connecting UDP to IP address outside LAN if no DNS server address is set.
Application	Throughput over PPP is too low.
Application	Startup message is sent before Bluetooth initialization is completed, 1s delay after startup message is needed before using Bluetooth successfully.
Wi-Fi	Unbalanced throughput for AP.
Wi-Fi	Disconnect event from Wi-Fi AP is sometimes missing when remote station goes out of range.
Wi-Fi	Not possible to disable Wi-Fi when connected to an Access Point, even though command

Area	Description
	returns OK
Wi-Fi	Interoperability issues with WPA, observed with Windows 7.
Wi-Fi	ODIN-W2 resets if AT+UWCL is issued while Wi-Fi is disabled (+UWCFG=102,0)
Wi-Fi	ODIN-W2 resets if AT+UWSSTAT is issued while Wi-Fi is disabled.
Wi-Fi	+UWSCA "reset action" not functional; factory restore is needed, if issued.
Bluetooth	SPP write timeout does not work (+UDWS with type 0).
Bluetooth	Latency is higher than expected (too much jitter).
Bluetooth	Bond Interoperability Issues (security modes 3, 4, and 5)
Bluetooth	No URC is sent after accepting remote bond request.
Bluetooth	User confirmation event is missing for SPS for security mode 2 and 4.
Bluetooth	Module resets if the SPP connection is received from an OS X device.

## 4 Revision History

R01	Initial release for Beta firmware v2.0.0
R02	Updated for final firmware v2.0.0