

Release Notes

Topic:	Firmware 3.0.0 for ODIN-W2
	UBX-16023323
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1 General Information

1.1 Released firmware image

File: ODIN-W26X_FW3.0.0.6.bin

1.2 Updated documentation

Document	Audience	Updates
AT Command Manual	Public	Updated with commands for the new features.
ODIN-W2 Getting Started	Public	Updated with instructions for the new features.
ODIN-W2 Data Sheet	Public	Typographical updates.
ODIN-W2 System Integration Manual	Public	Added GPIO pin layout.

1.3 Released tools

1.3.1 s-center v3.0.0

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

2 New features in Firmware v3.0

2.1 Wireless Ethernet

Wireless Ethernet enables high-speed Ethernet interface when operating as Wi-Fi Station. It enables Layer-2 communication from a host, connected over RMII or Ethernet, to any Wi-Fi device. It can be used for any protocols such as IPv4, IPv6, Profinet and so on.

2.2 Bluetooth low energy GATT Client

With GATT Client, it is possible to request data from a GATT server (sensor) using AT commands from an application processor.

2.3 Updated 802.11d functionality

Implemented full 802.11d functionality, including global access to Wi-Fi channels 12 and 13 outside countries where these channels are restricted.

2.4 Bluetooth privacy

Compatibility with Bluetooth devices implementing resolvable addresses (for example, iOS based devices).

2.5 GPIO control

With GPIO control, it is possible to read and write GPIO pins using AT commands.

3 Issues

3.1 Solved issues in 3.0.0

Area	Description
General	Restore factory setting using buttons when COM port on PC is closed and does not work.
Wi-Fi	Connecting to hidden SSID does not work.
General	Ethernet interface cannot be activated after deactivation (the module hangs).
General	Startup message is sent before Bluetooth initialization is completed, 1s delay after startup message is required before using Bluetooth successfully.
Wi-Fi	ODIN-W2 resets if AT+UWCL is issued while Wi-Fi is disabled (+UWCFG=102,0)
Wi-Fi	ODIN-W2 crashes if AT+UWSSTAT is issued while Wi-Fi is disabled.
Bluetooth	ODIN-W2 with Just Works and incoming GATT connection from iPhone pairing always fails
General	EDM no blue LED on incoming Bluetooth connection.
Wi-Fi	AT+UWSCAN crashes if invalid Supported Rates is sent by the AP.
General	AT service cannot be configured for SPS service (AT+UDSC=5,8,6 return error).
General	Flow control mechanism improved to avoid lost data packets.
General	Cannot handle PPP packets with length zero.

3.2 Known issues in 3.0.0

Area	Description
General	Customers upgrading from previous firmware versions are required to restore to factory defined configuration after firmware upgrade (AT+UFACTORY).
Bluetooth	When ODIN-W2 has two or more SPP services, it is not possible to select which one to connect to using RFCOMM channel (:port)
Application	Faulty default remote peer stored to flash during out of range configuration scenario.
Application	AT commands with Byte arrays with odd number of characters will be truncated instead of returning error.
General	Low throughput on TCP stream over Ethernet.
Bluetooth	Simultaneous use of GATT client and SPS connection could result in conflicts.
Wi-Fi	Unbalanced throughput for AP.

Area	Description
Wi-Fi	Disconnect event from Wi-Fi AP is sometimes missing when the remote station goes out of range.
Bluetooth	Latency is higher than expected (too much jitter) when acting as Bluetooth slave. Workaround is to configure as Master always.
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 BLE Serial Port Service for security modes 2 and 4.
Bluetooth	Module resets if the SPP connection is received from an OS X device.

4 Revision History

R01	Initial release for firmware v3.0.0
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